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# DIAL M FOR BANKING

Mobile banking is growing in India but not to the same extent as mobile subscribers.

What are the technology and adoption challenges faced by banks and other partners in the m-banking ecosystem?

A status report



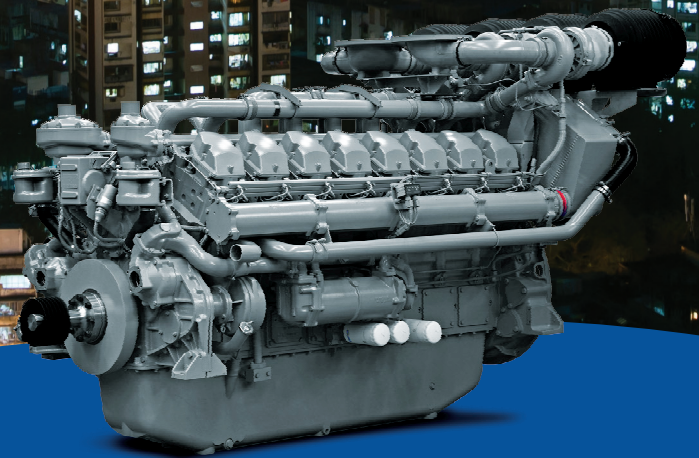


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# A QUESTION OF ECOSYSTEM



MAJOR PARTS OF  
THE TECH  
ECOSYSTEM ARE  
STILL MISSING  
THAT CAN UP  
INDIA'S DISMAL  
GLOBAL RANK IN  
THE DIGITAL  
ECONOMY

I often ponder over the incongruities and contrasts that define—or mess up—India. A Merc and a bullock-cart jostling for space on its dusty roads, disheveled surroundings of the exotically named gated communities in the so-called Millennium City (Gurgaon), and suchlike.

There are others, of course, who have had their share of not just such pondering but wondering and plodding as well. To cite an example, let me mention Sam Pitroda and the state of India's ICT infrastructure in the same sentence. From what I could gather recently from listening to India's famous telecom maverick and policy-maker, India is nowhere near its oft-stated ambitions in technology.

Speaking at the release of a MAIT-KPMG report on challenges and potential in increasing India's PC penetration, a visibly "traveled and tired" Pitroda minced no words in reflecting the true state of Indian ICT. Consider this stat: India ranks 68th in the Networked Readiness Index (among 144 countries) published by INSEAD and World Economic Forum (Finland tops the list and Burundi sits at the bottom).

He also said that Indians are fond of talking about the 70-80 billion dollars worth of software and services exports, but not many mention the steep rise in import of ICT hardware. While software export growth is slowing down, hardware import is sprinting ahead to reach upward of \$300 billion by 2020. There is a fear that the rising import bill can cause an uphill balance of payments problem for India.

The MAIT-KPMG report suggests some measures to increase the CAGR in sales of PCs from the current 6% to 18% which, it argues, will generate additional GDP contribution of about \$10.6 billion and employment for more than 1 lakh people.

In my opinion, steps like further reduction in duties, tax incentives for PC purchases and awareness campaigns are useful, but the critical need for India today is a robust ICT ecosystem. One that comprises large chip manufacturing units, world-class ports, excellent transport and logistics, incentives for manufacturing, and ICT infrastructure for domestic consumption.

We have parts of the ecosystem in an established and growing mobile telephony and relatively cheap labor. Pitroda also mentioned that the National Optical Fiber Network is going to connect 2.5 lakh village panchayats all over the country. But the big question is, When will the rollout be completed and how will we create value for the masses through the network? ("You cannot send enough emails" to consume a high-capacity network, quipped Pitroda.)

Needless to say, several parts of the ecosystem are either pot-holed or completely missing (It is well-known how the fab dreams of India have repeatedly turned out to be nightmarish.)

So the question—When is India going to move from reports on IT potential to one on real success?—continues to be in my list of ponderables.

sanjay.g@expressindia.com





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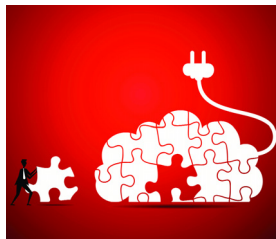


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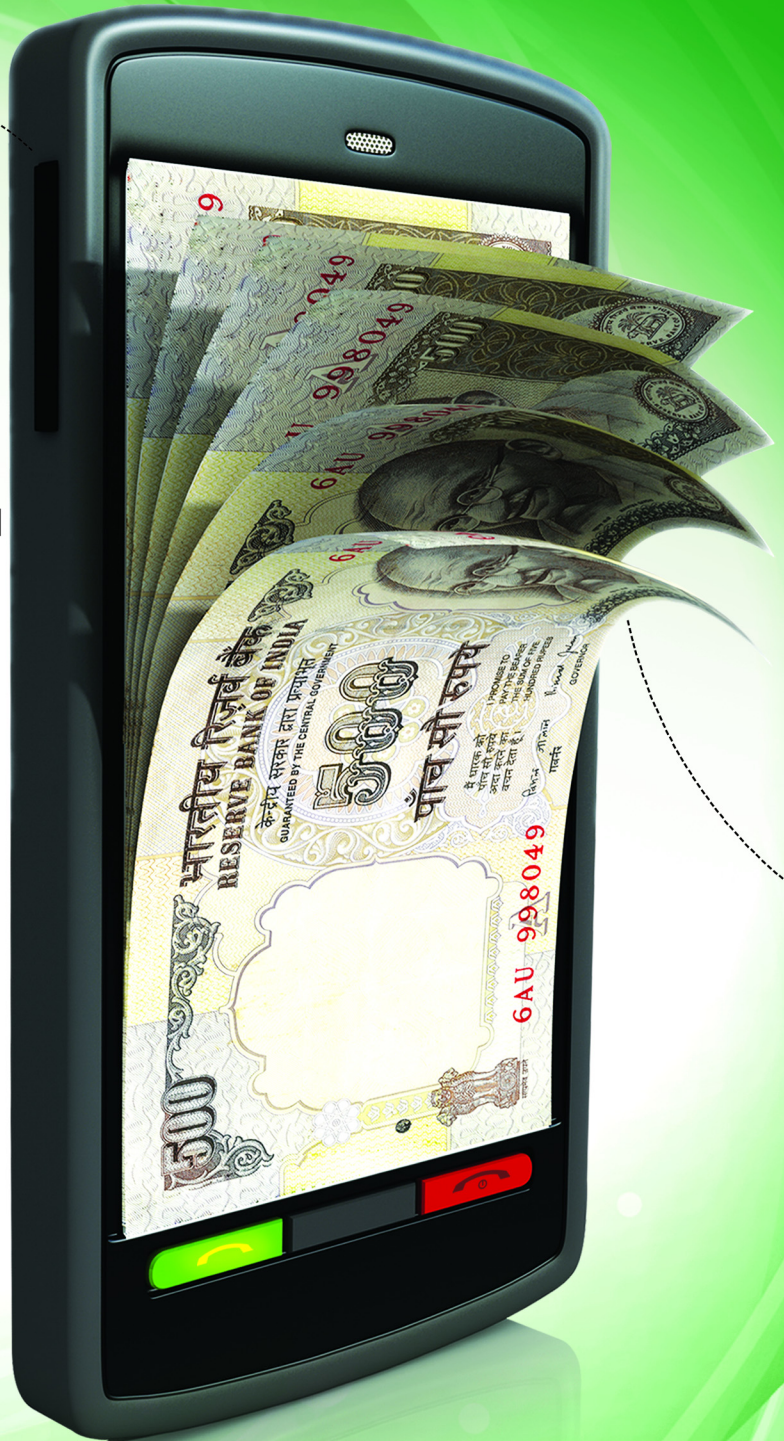
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# DIAL M FOR BANKING

Mobile banking is growing in India but not to the same extent as mobile subscribers.

What are the technology and adoption challenges faced by banks and other partners in the m-banking ecosystem? A status report

BY PUPUL DUTTA

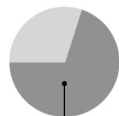




2012  
**5.22**  
MILLION

2011  
**2.67**  
MILLION

GROWTH IN  
VOLUME OF  
MOBILE BANKING  
TRANSACTIONS  
AS PER  
**RBI DATA**



**70%**  
OF BANKS  
IN THE  
COUNTRY OFFER  
MOBILE BANKING  
SERVICES

**25**  
MILLION  
REGISTERED  
MOBILE BANKING  
CUSTOMERS  
IN THE COUNTRY

In June this year, a multi-day cloudburst centered on the north Indian state of Uttarakhand, causing devastating floods and landslides and killing thousands in what is billed as the country's worst natural disaster since the 2004 tsunami. While help started pouring in from several parts of India, the relief work and reaching out to those affected was hampered for several days because of poor weather conditions.

In such a scenario where, among other services, banks became somewhat handicapped, the mobile payment technologies used by firms such as My Mobile Payments Limited (MMPL) came to the rescue of those wanting to remit money to the needy.

Money-On-Mobile (MOM), a mobile payment platform from MMPL, helped collect small amounts of money through mobile remittances from its two lakh subscribers. The objective for MOM was contribution of funds for the rehabilitation of Uttarakhand flood victims. The company wanted to achieve this through micro-payments, amounts as small as Rs 10-50. The m-wallet or mobile wallet technology used in these transactions was best suited for this task. It did not require one to go to a bank or even have an Internet connection to make the payment.

The above is an example of m-banking or m-payment technologies at work when most needed. But even in the everyday lives of millions of Indians, m-banking has increasingly begun to make a difference through quick, easy transactions.

Mobile banking set foot in India way back in 2006, when Indian banks started with the business correspondent model (the correspondents were assigned by banks and equipped with handheld devices to cover rural areas; until now around 2 lakh correspondents have been enrolled to cover an equal number of villages.)

## NFC: STILL IN THE MAKING



Mobile banking is also set to include near field communication (NFC), a technology in which mobile devices such as smartphones communicate with each other over radio frequency either by quick touch (called tap) or within a few inches of each other. The patents related to NFC were filed as far back as 1980s but the first big push from device makers is believed to have started in 2004 with the launch of the first NFC phone, the Nokia 6131.

The technology has been slow to take off because of multiple reasons. But with the growing adoption of NFC capabilities in most new smartphones and the prices of devices coming down, things could change. According to a report by Strategy Analytics, by the end of 2013, 400 million devices in use worldwide will support NFC. That means a sizable global population can use NFC-enabled services, including m-banking and m-payments.

While NFC capabilities are being built into the SIMs or MicroSD cards of handsets, companies such as Google and MasterCard are part of the ecosystem being created to make NFC commercially

successful. For some time, Google has been promoting its Google Wallet, an app available on its Play store that converts the phone into a digital wallet by storing the user's credit or debit card information. The same can be used to make payments at, say, MasterCard's PayPass merchant terminals that support NFC.

Nevertheless, NFC is still a nascent standard when it comes to mass adoption. In India, there are several trials, pilot projects and small experiments featuring NFC. Among them is an NFC payment solution that has been deployed at 15 of PVR Cinemas' prime locations.

NFC has a few challenges in India: there are hardly any merchants that have the necessary receivers hooked up to their POS for accepting NFC payments. The technology isn't cheap, so the uptake has been very slow or negligible.

In banking, financial services giant Citi had launched an NFC field trial for shopping Bengaluru in partnership with Vodafone and MasterCard several years back. But nothing much was heard about broader rollouts and largely, NFC still remains something on the horizon.

However, it is only recently that we are starting to take full advantage of various mobile technologies for banking and payments. With m-wallets coming into the picture, remittances have become just a click away for India's unbanked majority. (M-wallet generally refers to payment services operated under financial regulation and performed from or via a mobile device. Instead of paying with cash, check, or credit cards, a consumer can use a mobile phone to pay for a wide range of services and digital or hard goods.)

Also, with the increasing mobile penetration in rural areas, mobile banking is seen as a tool to facilitate financial inclusion of the rural population. In urban areas, m-banking is seen as a tool of convenience where one is able to do branchless banking at a much faster pace.

Several leading banks have tied up with telecom operators as well as handset manufacturers so as to provide this facility for an enhanced customer service at the same time facilitating financial inclusion. Recent examples include the State Bank of India (SBI) and ICICI Bank's partnerships with Bharti Airtel and Vodafone Essar respectively.

### The m-banking market

As per RBI data, the volume of mobile banking transactions zoomed by the end of 2012 reaching 5.22 million from 2.67 million in 2011. Today, nearly 70% banks in the country offer mobile banking services. At present, the country is estimated to have around 25 million registered mobile banking customers and this number will grow multifold in the next 2-3 years, believe experts.

Currently, India has about 554.8 million mobile users and 143.2 million unique Internet users, according to a study, India Mobile Landscape 2013, released by research firm Juxt. The study estimates that around 94.7 million users access the Net from their desktop/laptop, smart TV or mobile data connection such as GPRS/EDGE and 3G.

Similarly, a study done by SAP and IDC on banking trends in India recently revealed that more than 50% of



incremental Internet usage is coming from mobile devices. Services such as Immediate Payment Service (IMPS) launched by the National Payments Corporation of India (NPCI) has given further boost to mobile banking usage in India. It goes without saying that banks have launched their mobile banking initiatives with all the options of usage from the low-cost Java phones to the high-end smartphones.

Harun R Khan, Deputy Governor, RBI, says, "A potential factor that has attracted all the stakeholders (in mobile banking) including policy-makers to this innovative technology is the lower cost associated with this model in providing banking services amongst existing customers and in taking banking to the hinterland as well. A market study claims that a mobile banking based transaction costs about 2% of the branch banking cost, 10% of the ATM based transaction cost and 50% of the Internet banking cost."



Mobile banking has moved from the J2ME platform to Android, iOS and Blackberry platforms, which continue to be the preferred platforms.

**Shalini Mehta,**  
Executive Vice President,  
Kotak Mahindra Bank

### Technologies in vogue

Mobile banking is seen as an extension of the existing payment infrastructure of a bank to mobile phones, as a channel for leveraging the mobile network and its reach, to deliver banking services to consumers.

So, for the end-to-end mobile banking value chain, it is typically supplied or customized either by a mobile banking vendor or the specialized technology unit within a bank. Initially, mobile banking technologies could be categorized into two environments: server-side technologies and client-side technologies. The former includes applications built on a server, away from the consumer's SIM or mobile handset (examples: SMS, IVR, USSD2 and WAP).

In the client-side category, applications, solutions and service offerings are built or embedded on a consumer SIM or mobile handset. Examples of client-side applications include S@T and J2ME (Java).

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A goal amongst m-banking providers is to be able to allow sending money between different mobile operators wallets.

**Geoff King,**  
Head of Mobile Money, Aircel



I think mobile banking's biggest challenge has been consumer trust over the security of such transactions.

**Annie Mathew,**  
Director, Alliances and Business  
Development, BlackBerry India

Nevertheless, the environment has advanced a lot from the J2ME service offering and now applications are available on different OSes.

"Mobile banking has moved from the J2ME platform to Android, iOS and Blackberry platforms, which continue to be the preferred platforms for mobile banking. Slowly, the Windows platform is also catching up with others," explains Shalini Mehta, Executive Vice President, Kotak Mahindra Bank.

At present, m-banking offers functions like funds transfer, IMPS, inquiry services, bill payments, mobile/DTH top-ups and m-commerce (or mobile shopping).

According to Mehta, Kotak Mahindra has invested in creating a unique design and experience for m-banking on various platforms. "A hybrid approach is smartly being used for select features. It allows opening HTML pages inside the app frame," she says.

Nonetheless, the market has just begun to open up and we are yet to see advanced features and capabilities in mobile banking.

According to Vikrant Chowdhary, Director - BFSI, SAP India, the market is just maturing to advanced, truly multi-channel solutions. He touts the Sybase 365 platform from SAP as an enterprise-grade development platform that can help banks or solution providers quickly build compelling, intuitive mobile apps. "We enable customers to take advantage of a robust set of services and libraries, while leveraging in-house skill sets, to create innovative mobile apps with cutting-edge user interface design," he claims.

### Platform interoperability

The issue of interoperability between various mobile banking standards seems to be a myth than reality. According to an article on Wikipedia, "There is a myth that there is a challenge of interoperability between mobile banking applications due to perceived lack of common technology standards for mobile banking. In practice, it is too early in the service lifecycle for interoperability to be addressed within an individual country, as very few countries have more than one mobile

banking service provider. In practice, banking interfaces are well defined and money movements between banks follow the ISO-8583 standard. As mobile banking matures, money movement between service providers will naturally adopt the same standards as in the banking world."

As far as India is concerned, interoperability is a work in progress. According to Geoff King, Head of Mobile Money, Aircel, interoperability is a thing to be worked on constantly by telcos and service providers. "A goal amongst m-banking providers is to be able to allow sending money between different mobile operators' wallets," he says.

In the opinion of Surinder Pal Singh, Joint General Manager, Punjab & Maharashtra Co-Operative Bank Ltd, the desire for interoperability is largely dependent on the banks themselves. While SMS can provide basic services, banks have to work on mobile applications that provide better security, are easier to use and allow more complex capabilities similar to those of Internet banking.

### The m-wallet business model

The revenue model for m-wallets usually varies from company to company but most often, companies prefer a cost-per-transaction approach.

Suresh Sethi, Business Head/CEO of M-Pesa, the mobile wallet brand from Vodafone, says, "We generate revenue from every transfer. Usually it is 10% fee of every transaction done which is payable by the bank."

For the banks, it is the incremental reduction of costs for serving the customer that matters — something that allows them to pay the transaction fee to mobile operators. If they were to serve the consumer through a branch for the same service, the cost would be much higher.

Aircel, which claims to provide affordable services to migrant workers, charges the customers as well. "Generally, a customer is charged a small percentage fee on transactions and the proceeds are divided between various parties involved — which includes the trade agent, platform providers, the partner bank and the telecom operator.



This obviously makes it a very narrow margin business. At Aircel, we charge a very minimal amount which is between 1.5% to 3% of the amount of transaction,” says King.

My Mobile Payments, on the other hand, does not believe in burdening its customers with any extra cost. Shashank Joshi, Managing Director, MMPL, says, “Transactions happen between registered consumers and registered merchants. The consumers are not charged anything and we make money from merchants.”

### Growth and challenges

Till recently, SMS-based banking was the only option available for customers, and they also used it to recharge their mobiles or top up their DTH accounts. It still has remained the most popular mode of mobile banking. However, as the penetration of smartphones grows, banking through other options such as mobile apps are set to grow manifold.

M-wallet is also being projected as the next big thing in the payment ecosystem. It is believed that there would be different kinds of wallets with varied propositions for different segments.

However, many believe that the strict regulations and restrictions put by the RBI could slacken the growth of mechanisms such as m-wallets. One dampener is that RBI guidelines require the holder of an m-wallet to be subject to “a fully compliant KYC” process. In practice, what this translates into is that unless a person has a bank account, they cannot use their mobile for cash-out facility.

A case in point is that of Vodafone, which till recently used to offer a semi-closed wallet for mobile remittances (in which the cash-out was not possible). But after the telco tied up with ICICI bank, it can offer customers the cash-out facility on mobiles as well. This is still in a nascent stage and Vodafone has very few customers at the moment.

So how does ICICI contribute in this collaboration? “According to the current RBI guidelines, Mobile Commerce Solutions Ltd, which is Vodafone’s fully owned subsidiary, has a license to issue a semi-closed prepaid instrument (wallet)

to people. For an M-Pesa wallet, a person needs to provide only a few basic KYC documents and he can avail this facility. Now, with our tie-up with ICICI Bank, we give people the capability to send money which can be used for cash-out as well.”

In this way, a bank-sponsored wallet changes the nature of the wallet from semi-closed to an open one. Imagine a migrant worker in Mumbai who wants to send money to his family in Bihar: under the current scheme of things, he cannot do that unless a bank steps into the picture.

Another challenge that mobile banking currently faces is the relatively slow adoption by users owing to concerns about the security of transactions. According to Annie Mathew, Director, Alliances and Business Development, BlackBerry, India, “I think mobile banking’s biggest challenge has been consumer trust over the security of such transactions. That said, just as online banking caught on, as mindsets change with awareness, mobile banking will see more of an uptick. While banks are creating mobile applications, they are focusing on securing it and also working toward consumer education in relation to this. It is only a matter of time for mobile banking to become the norm.”

Lack of a well-developed ecosystem is another challenge. There is currently a very small percentage of merchants and vendors who have adopted the mobile banking services.

Besides, the interoperability issues between different mobile operator accounts is still to be sorted out and is something that can put off potential m-banking customers.

According to Anand Naik, Managing Director - Sales, India and SAARC, Symantec, the various players in m-banking need to take a holistic approach that brings together identity and device security, information protection, context and relevance and the benefits from leveraging the cloud.

So, while the mobile phone is a potent tool to facilitate financial services and thus financial inclusion, several issues remain to be addressed.

## RBI GUIDELINES FOR M-BANKING

- Banks should have a system of registration before commencing mobile based payment service to a customer.
- When a bank offers mobile payments service, it may be ensured that customers having mobile phones of any network operator should be in a position to request for service. Restriction, if any, to the customers of particular mobile operator(s) may be only during the pilot phase.
- To ensure interoperability between banks and between their mobile payments service providers, it is recommended that banks may adopt the message formats being developed by Mobile Payments Forum of India (MPFI). Message formats such as ISO 8583, which is already being used by banks for switching of ATM transactions, may be suitably adapted for communication between switches where the source and destination are credit card/debit cards/pre-paid cards.
- Implement a minimum of 4 digit customer mPIN (6 digit mPIN may be the desirable goal).
- The Information Security Policy of the banks may be suitably updated and enforced to take care of the security controls required specially for mobile phone based delivery channel.
- In cases where the customer files a complaint with the bank disputing a transaction, it would be the responsibility of the service providing bank to address the customer grievance. Banks may formulate chargeback procedures for addressing such customer grievances.

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# EXPRESS Technology Senate11

What CIOs Want

With the Abu Dhabi event concluded recently, Express Technology Senate makes a memorable comeback. Here are the event highlights, presentation excerpts, power panel discussion points, and fun filled moments from India's most coveted CIO forum



EVENT

EXPRESS TECHNOLOGY  
SENATE 2013

[www.expresscomputeronline.com](http://www.expresscomputeronline.com)

# SHADES OF SUCCESS

The Abu Dhabi edition of **Express Technology Senate**, held at the scenic Hotel Freemont Bab Al Bahr from October 3 to 5, offered delegates a balanced blend of conferencing, fun, networking and sightseeing



From left: Sanjay Gupta, Editor - Express Computer; Shekhar Dasgupta, Founder-CEO; GreenField Software; Subramanian N, Technical Director - Management Consulting, KPMG India; and Sanjay Jaiswal, Senior VP, The Indian Express Ltd, inaugurating the event



# EVENT

## EXPRESS TECHNOLOGY SENATE 2013

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Delegates arriving at the hotel in Abu Dhabi



Delegates at the registration desk



Event compere Kavea with a delegate



Hotel Freemont Bab Al Bahr



# EVENT

## EXPRESS TECHNOLOGY SENATE 2013

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Delegates at one of the sessions



Dance troupe regaling the audience on Day One



Tanoura dancer Mahmoud held the audience in thralls



Three cheers for the performers...



# EVENT

## EXPRESS TECHNOLOGY SENATE 2013

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Jubilant delegates posing before the imposing Sheikh Zayed Mosque at Abu Dhabi



The inner beauty of Sheikh Zayed Mosque revealed



Shopping for dates at the local market



Shopping for gold at Dubai



# EVENT

## EXPRESS TECHNOLOGY SENATE 2013

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Delegates at the stalls put up by NxtGen Datacenters, Fiberlink, Cirrologix, Plantronics, Delta Power, and Vu Telepresence





# CONTINUOUS INNOVATION NECESSARY FOR SURVIVAL

The opening keynote address at Express Technology Senate stresses on the impact of SMAC—Social Media, Mobility, Analytics and Cloud



Subramanian N

The keynote address at the 11th Express Technology Senate 2013 was in sync with the theme of the event: Continuous Innovation - Bridging Technology & Business Strategy for Agility and Growth. Delivering the keynote, Subramanian N, Technical Director - Management Consulting, KPMG India, spoke about the world moving from the pre-digital era to the digital one and further on to the post-digital age.

“What is happening is that IT has moved from a support function to a strategic function. In the post-digital era, this is further transitioning to a business-enabler role,” he said. In the new era, enterprises can use IT to emerge as leaders in the marketplace.

According to him, innovation will become a bottom-up process in which customers inputs will drive innovation. “The convergence of social media, mobility, analytics and cloud (SMAC) will drive the

next generation of innovations.”

Subramanian noted that the increasing adoption of SMAC by people worldwide is bridging the digital divide.

He gave a broad overview of how these technological paradigms are growing in size and influence and becoming instruments of change for people as well as businesses.

Sharing some statistics, he said that the number of social media accounts in the world will grow from 3.13 billion in 2012 to 4.87 billion by the year 2016. During the same time, mobile handset shipments will grow from 1.48 billion to 1.85 billion. Similarly, the analytics market will grow at a whopping CAGR of 73% over the next few years.

Relating how the very idea of innovation has undergone drastic changes, he said that in the pre-industrial and industrial eras, innovation was primarily the invention of new products; then innovation was seen as engineering and standardization supporting mass production. After that, innovation was carried out mainly as incremental process improvement to reduce costs, but now innovation is seen as customized adoption of technology to enable business strategy and manage business change.

“In the backdrop of new trends impacting business ecosystems, innovation is necessary for survival. Business models and processes will require to undergo a radical change with technology innovation to meet the consumer expectations and at the same time remain competitive,” he said.

Subramanian summed up his keynote with these words from leadership expert and author Robin Sharma: “Dreamers are mocked as impractical. The truth is they are the most practical, as their innovations lead to progress and a better way of life for all of us.”

## EXPRESS TECHNOLOGY SENATE 2013

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Services for the Intelligent  
Enterprise | **PG 24**

## Must-Have Insights for IT Infra Decisions

A.S. Rajgopal, MD, NxtGen Datacenter & Cloud Technologies, talks about the key things CIOs should keep in mind when evaluating hosting partners

Day one of Express Technology Senate began with insights into the top technology trends like big data, in-memory computing, etc. A.S. Rajgopal, Managing Director, NxtGen Datacenter & Cloud Technologies, noted that there has been an infrastructure change in the last decade but the key issues have remained the same. The entire IT ecosystem is driven by reducing the runtime cost of IT and deliver more business value and growth. "What we need today is to build infrastructure to run the applications that support new age business," he said.

Also, decision making in an infrastructure based project cannot be always driven by cost, he asserted.

According to Rajgopal, infrastructure has evolved from being physical to virtual to software defined. "Irrespective of so much change we still need managed services," he highlighted.

Basically, the key role of a CIO has not changed or that of IT in a company. Majority of the companies look for managed services around the infrastructure space, he quipped. "However, few things that we are not comfortable with is — cloud," he said. Almost all customers expect cloud to be an open platform so that they can move from one platform to another seamlessly. Basically, companies look for an open platform in order to save numerous license issues.



A.S. Rajgopal

Another issue which most CIOs face day in and day out is about capacity. Also, the question that how can you have infrastructure sitting idle? Therefore, managed services is the answer to most problems that CIOs face. Managed services should not be looked upon as an infrastructure layer but as something that adds value to the business.

## Next Generation Security for Next Generation Networks

Sunil Sharma, Vice President – Sales and Operations, India and SAARC, Cyberoam, gives a unified perspective on keeping enterprise data safe

Talking about the security landscape in India and the new advanced threats which CIOs face everyday, Sunil Sharma, Vice President – Sales and Operations, India and SAARC, Cyberoam said that people these days expect to achieve foolproof security in the limited IT budget that they have. However, often CIOs are unable to do anything new or adopt an extra software solution given the restriction in their already small budgets. What's more, companies today work on an opex model rather than the capex one. "In the last decade or so, the

technologies are being ruled by North American companies," Sharma noted.

Further, he spoke about how it is important to consolidate IT solutions for easier and quicker management. He elaborated on the company's offering wherein Cyberoam's Unified Threat Management hardware appliances offer comprehensive security to organizations, ranging from large enterprises to small and branch offices. Multiple security features integrated over a single, Layer 8 Identity-based platform make security simple, yet highly effective. "Cyberoam's Extensible Security Architecture (ESA)



Sunil Sharma

and multi-core technology carry the ability to combat future threats for organizations' security," he said.

Cyberoam's network security appliances also offer a user, time and role-based bandwidth management approach which prevents users from consuming huge amounts of bandwidth for non-productive surfing and downloads, Sharma elaborated further.



## Bridging Tech & Biz Strategy for Agility and Growth

The panel discussion on the theme of the Technology Senate throws up some interesting points on transparency and budgeting, among others



(L to R) Rishi Sareen, Head – IT, Blue Dart Express; Prakash Dharmani, Global CIO, Essel Propack; Keshav Samant, Director & CIO, Religare Enterprises; and Subramanian N, Technical Director – Management Consulting, KPMG India (Moderator)

The panel discussion on “Continuous Innovation: Bridging Technology & Business Strategy for Agility and Growth” was set in motion with Subramanian N, Technical Director – Management Consulting, KPMG India, asking the CIOs what role innovation plays in their respective organizations and how they use innovation while defining IT strategy.

He said that innovation has been the buzzword in supporting the business and understanding business criticality. “The complete business cycle is changing. Without IT, it would not have been possible for business processes to get

shrunk so fast; for instance in the oil industry, wherein the refinery gets built much faster today,” he noted.

Keshav Samant, Director and CIO, Religare Enterprises, said, “From the financial sector’s perspective i.e. in the broking sector, a lot of innovations have happened such as high-frequency trading, low latency etc. At the same time there are very intelligent, high level frauds too happening. But there are also other pockets in financial services that have not evolved so much, especially front-line ennoblement.

Samant further elaborated, “There was a time when BFSI companies had

lots of brick and mortar presence. It’s only recently that the online, low-touch model has come into play, so for us, it’s important that we use social media effectively, for the new customers.” In terms of challenges, there is too much transparency for the user because IT brings a lot of transparency and banks usually are not used to that. “But the top management was supportive and IT is driven from top down,” he added.

Rishi Sareen, Head – IT, Blue Dart Express, while talking about supply chain management said there has to be transparency. “To give an example, a shipment goes through an average of 17 checkpoints before the delivery is made. If we do half a million deliveries, you can imagine the amount of data we generate.”

It is important to track the entire lifecycle of a shipment. “We schedule the reports and put them on auto-email and save five man-days, which is tremendous,” he said. Also, top customers are tracked on a monthly basis, he informed.

Next, the moderator asked what percentage of the IT budget was used for innovation. To this Sareen replied that about 5-10% of the budget was always kept aside for innovation.

Prakash Dharmani, Global CIO, Essel Propack Ltd, however, quipped that he doesn’t have the luxury of that kind (5-10% budget allocation for innovation) on budgets.

To this Sareen answered saying that the customer has usually made the payment for the shipment and wants to know where the shipment is.

Talking about new deployments, Dharmani said, “We are in the process of deploying Salesforce. Our clients are global and hence, it makes sense to have a common platform.” He further explained that one needs to be focused on the pain points. For example, document turnaround time, can’t be improved overnight. “You can’t do innovation in isolation. For us management was very proactive to allocate funds,” he said.

## Intelligent Document Services for the Intelligent Enterprise

While organizations continue to print endlessly, MDS gives a sense of order to the seemingly incorrigible task of printing. This panel throws light on MDS and its benefits



Vipin Kumar, CIO, Escorts Ltd. who was the moderator for this panel discussion on “intelligent document services for the intelligent enterprise”, opened the debate by saying there are many challenges related to managing tonnes of data and documents, be it in any industry. Secondly, it is not just managing the data but also its safety, which is an even greater task.

Satej Revankar, VP – IT, Nitco Tiles Ltd., said that search and retrieval becomes most important. Besides, archival and storage are the issues which the company faces in its business.

Basically, there is always a chance of losing the data. Data can get lost or stolen or sometimes just accidentally deleted. “One needs to be sure of handling the content. Content is usually scattered in the organization and we need to keep it together to enable easy search and retrieval. Associated with this issue is converting heaps of files into electronic form and keeping them safely saved on the server,” highlighted Pratap Pat Joshi, CIO, Mercedes Benz India.

(L to R) K Bhaskar, Sr Director, Office Imaging Solutions Division, Canon India; Satej Revankar, VP – IT, Nitco Tiles Ltd; Jitendra Mishra, Global Head – IT, SIRO Clinpharm; Pratap Pat Joshi, CIO, Mercedes Benz India; and Vipin Kumar, Group CIO, Escorts Ltd (Moderator)

“There is huge opportunity to automate these (business) processes,” noted Jitendra Mishra, Global Head – IT, SIRO Clinpharm, adding that they have automated all the processes in their organization.

Questioning the panelists, K Bhaskar, Senior Director, Office Imaging Solutions Division, Canon India asked how the company can make the entire gamut of managed services effective? “Companies need to bring down the wastage of paper. With Managed Document Services (MDS), we can save almost 10 lakh documents per month. Also, every document has a lifecycle and we can preserve that with MDS,” he said.

Besides, companies need to have a review mechanism, wherein constant review/rethink decisions are made for all strategies.

The panelists talked about managing the collective knowledge and experience of employees which is also

referred to as “information capital”.

“But how do you harness employee knowledge, their ideas, and how they generate and share information with each other and the wider business,” they pointed out.

With information capital as a driver of economic growth, it’s becoming a core business focus for businesses seeking to remain competitive in the future. Research illustrates the alarming costs of not doing so. According to available data, about 7.4 hours are lost a week “searching but not finding information” and “reformatting data from multiple sources” which is about \$12,000 per employee per year based on average salaries (source IDC). “IDC also predicts that by 2020 digital information will have grown by factor of 30, yet the number of global IT professionals expected to manage it will only have grown by factor of 1.4,” ones of the panelists concluded.



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## CANON POWER BREAKFAST

The session witnesses CIOs share their experiences and challenges in using managed printing and document management solutions



**K** Bhaskar, Senior Director, Office Imaging Solutions Division, Canon India, invited the CIOs gathered for the Power Breakfast to share their experiences and challenges in using or implementing document management and managed printing solutions. He shared the global trends and said that worldwide, as many as 60% of companies are moving toward document management and the trend is picking up pace in India as well. Though, he admitted that it is taking a much longer time here.

Sharing his perspective on the issues, Vinod Gupta, Senior GM - IT, JK Paper Ltd, said that his organization has been using managed printing for the past 7-8 years. He said that one of the challenges is to take care of the comfort level of users in terms of how much they need to walk to the printer to get a printout. In document management, the challenge is in securing the document and being able to retrieve it quickly.

Sometimes, the message needs to be driven across the organization in terms of mindset and habitual changes needed to implement such solutions.

Bhaskar shared the example of a company that consolidated its printers from 3000 to 385 and how, among others, even the CEO of

the organization walks to the nearest printer bay to take a printout. He also said that an optimum solution can be designed for organizations so that people do not have to walk longer than a few steps.

Gupta agreed and said that change management becomes an issue only when the new practices are not user-friendly.

Prasad Dhumal, Senior Director - IT, South Asia, DHL Express, recalled how his organization invested a lot of money on scanners and, through digitization of documents, was able to cut down shipment time from, say, six days to two or three. "If you use document management smartly, you can create a lot of value," he said. However, one issue he has been struggling to cope with relates to the consumables, as the quality of scanning comes down after certain number of scans.

According to Syed Hassan, CIO, Britannia, organizations with a large number of customers certainly need a document management solution and they should take a holistic approach toward the same.

Bhaskar of Canon shared an interesting statistic: that 40-50% of IT escalation issues in a typical organization are related to printed—something that can be mostly taken care of by solutions such as managed printing.

## Check Point Power Breakfast

The discussion in this interactive session revolves around the right approach to adopting security, mobile security issues, mindset challenges and the need for effective policy



The Check Point power breakfast on the second day of Express Technology Senate began with Harmeet Singh Kalra, Head Strategic Accounts, Check Point Software Technologies asking all the CIOs how did they choose/formulate their security policy?

“We want to understand what goes on in your mind before adopting any security solution, how do you evaluate and implement the software,” asked Kalra.

Sebastian Joseph, CTO, DDB Mudra Group, which is into advertising business said, “Our environment is our biggest challenge in security. Everybody has access to Wi-Fi and there are many devices getting connected.”

Brijesh Datta, Head, IT Risk Management, Bharti Airtel Ltd. elaborated on the issues faced by the company saying, “Firstly, huge amounts of our data is shared with our partners, so, the question arises how do we secure that data. Secondly, hygiene of laptops is

another area where we have to be very careful. Massive amounts of our data gets outsourced. Also, with BYOD, how do you go about securing your data?”

Airtel in any case, according to Datta is looking at securing concurrently, mobile device control. “We are moving into pure device control and selectively permitting devices on our network,” he said.

Vivek Joshi, CTO, HDFC Securities Ltd, said that budgets for security are not a problem. The problem is when you are opening up, how would you manage security? “How do you ensure security is no more a challenge. Moreover, every security solution takes a toll on the performance of system, so how would you manage that,” he quipped.

The question that often arises is how do we convince compliance? One cannot possibly identify any behavioral pattern by few keywords. “Technically you can block pen drive’s slot but how practical is this solution we often ask,” said Nilesh N Khanolkar, Vice President – IT,

IL&FS Ltd.

Clifford Torres, Executive VP – IT, Kotak Securities Ltd explained that data security has to be a campaign that is driven top down. “Identifying various areas in the organization that need to be orchestrated in the department, like single sign on, etc. is important,” he said.

The IT decision makers attending the power breakfast agreed that the technological challenges can always be sorted but it is the mindset that one needs to change. Basically, technology is just a means to an end.

Satish Pendse, President, Highbar Technologies Ltd. (Group company of HCC) noted that about 50% of the operations happen outside the chairman’s room and peons etc. too sometimes get access to information.

The discussion concluded with the thought that the major challenge comes when there are multiple devices on the network and hence, companies not only need a good security solution but also an effective policy.



## Mobility Simplified

The panel on mobility discusses key issues afflicting the rollout of effective BYOD solutions: lack of market maturity, heterogeneity of devices and platforms and data security



(L to R) Sanjay Gupta, Editor, Express Computer (Moderator); Satish Pendse, President, Highbar Technologies (HCC Group); Kamlesh Laddhad, Product Head, Fiberlink; and Brijesh Datta, Head – IT Risk Management, Airtel

Sanjay Gupta, Editor, Express Computer who was also the moderator of the panel discussion themed “mobility simplified” opened the discussion by pointing out that whether one likes it or not, mobility is here to stay. In fact, the latest trend now is BYOA – bring your own anything. The idea is that people are getting more mobile and the private and public life is increasingly getting mixed. According to a report by NASSCOM, enterprise mobility market is expected to grow by 15% CAGR. In APAC, this growth is going to be higher.

He opened the stage for discussion asking about the challenges CIOs face with an increasing trend of BYOD. Also, is mobility something that we can put off any longer?

Satish Pendse, President, Highbar Technologies (HCC Group), said that mobility has arrived and it is impossible to ignore the trend. Moreover, just like any solution cannot solve all our problems, similarly issues created by mobility cannot be dealt with overnight.

Kamlesh Laddhad, Product Head, Fiberlink, pointed out, “It should be noted that about 435 million devices were sold globally last year, out of which around 45-50% are smartphones. These are very high

numbers. Consumers who are buying the product are also using them for various purposes. So, how exactly do you make use of the power that the device gives you? Also, what happens to all the tons of data and how do you manage that?”

Brijesh Datta, Head – IT Risk Management, Bharti Airtel Ltd., asserted that mobility has been there for a long time but what is changing now is BYOD. People have started using their own devices more now than ever before. Not only are they bringing in smartphones to work but also carrying their Macbooks or personal laptops to work.

So, overall there are many concerns related to mobility. Gupta asked the panelists to elaborate on what are the key concerns and how best can companies handle them.

Pendse said that cost sharing doesn't come as a priority. BYOD is now more in demand from employees. “The main issue is the heterogeneity of devices and the fact that your application has to work on all OSes and also meet the IT security guidelines as well.”

Laddhad, on the other hand, said that

one has to keep running like Mario (in the old popular computer game) as technology is changing every day and there are new versions of OSes ever so often. “What's more, all these OEMs try very hard to give more and more features on the devices. You need to make sure you pick the right thing and have support. Mobility is a challenge but if handled smartly, it can turn out very productive,” he added.

Taking the discussion forward, Gupta said that there are too many MDM solutions available in the market as well as many new vendors but the question which then arises is, are these even good enough?

Pendse answered the question saying there are too many solutions but which one will suit your need, one needs to decide carefully. Mobility solutions, however, are not yet very mature in India. Only 60-70% of the entire solution is used and remaining is customized, whereas, with ERP solutions this is not the case. So, there will be some time before we see market maturity in BYOD and until then, one must put the business knowledge to work before a strong solution can be devised.

## Documenting Developments in Managed Services

In this presentation, K Bhaskar, Senior Director, Office Imaging Solutions Division, Canon India talks about the role and importance of managed document services

**K** Bhaskar, Senior Director, Office Imaging Solutions Division, Canon India talked about the global trends in managed document services (MDS) saying “everybody is more comfortable in buying their own solutions and managing them.” However, the trend is changing.

He questioned the audience asking why do most companies not allow someone else to manage it? Since everything else is outsourced, then why not this as well?

“Worldwide 60% of the people are moving towards MDS, while 40% feel they can do a better job on their own. The motivating factors are cost, at the highest level, followed by gain in expenses,

reduction in IT burden,” he claimed.

Today, in India we have reached stage one wherein a little bit of assessment has been done. We have also achieved a little bit of stage 2; that is optimization has been done. “But can the vendors be also a part of it, is a question we often ask. This is also an important challenge,” Bhaskar said.

Stage three is business process improvement. So, what are the inhibitions in adopting MDS? Bhaskar explained that dependence on a partner from outside makes CIOs more skeptical. Another factor is the long term locking period which binds companies to stick to one vendor for a long period. Lastly, who



K Bhaskar

will maintain the existing fleet?

“There are many benefits too, like the average total savings were \$1 million which represented an average reduction of 30% of the total cost. Carbon dioxide emissions too were reduced by 60%. Lastly, 10% of the IT department’s time was freed up to focus on other strategic activities,” Bhaskar concluded.

## Security Blueprint for New Age Threats

The presentation from Check Point Software Technologies focuses on the growing need for security and the right approach for tackling new age threats

**K**apil Awasthi, Security Consultant, Check Point software Technologies began his presentation with a quote saying, “Security is driven by insecurity.”

It is true that security practitioners around the world are trying to chase the unknown. “The basic premise of any security policy is what can happen to us tomorrow which we do not know today. We are chasing malware because in our environment there are so many applications that we wouldn’t know if a particular app is malicious or malware,” he noted.

So, what are the constraints when we

talk about malware? “We can’t always keep running in terms of security check. Also, we cannot keep doing the analysis. Hence, time is the biggest constraint,” Awasthi pointed.

The second important constraint is space. The memory or CPU has limited space and companies therefore are unable to load heavy security programs.

So, what should be the fundamentals of any security policy, Awasthi asked. “Find the right technology and deploy it at the right place. Secondly, enforce best practices and force hackers to go for the unknown. Lastly, integrate one and two,” he said.



Kapil Awasthi

Besides, be constantly aware of the change that is happening around us. The attack vectors are changing and the cyber war is moving outside of the server farm. “Security controls are heavily server farm centric. End point security in itself is a lost battle,” he quipped. Also, internet usage is changing constantly with the traffic pattern too getting altered. Increasingly web traffic is becoming ‘https.’



## Simplified Business Continuity

Prateek Garg of Progressive Infotech talks about the need for business continuity and the best ways to keep the business up and running in case of any untoward incidents

Prateek Garg, MD and CEO, Progressive Infotech, began his session talking about the traditional back up and set up. “We have multiple solutions for everything,” he said.

Commoditization of core cloud features is causing new, simplified and unified business continuity differentiated services. In the present day scenario, business continuity is perhaps on top of the mind of CIOs today.

So, what are the common back up challenges, Garg asked his audience. “Data protection, risk management and

total cost of ownership of back ups. It’s not just about licensing it’s about back ups,” he said.

“The question that arises in such a scenario is what is the best way to back up? Moreover, a smarter question would be have I actually backed up and can we recover our data anytime we lose it,” explained Garg.

“Most CIOs fret or think how much money I will lose if I lose back up. We have launched mydatasync. It cuts across everything, from servers to all platforms. Today, it is about unified cloud back up. Depending on what your



Prateek Garg

compliance requirements and other needs are, CIOs should choose a solution,” he concluded.

## Succeeding in BI and Analytics

The presentation by MAIA Intelligence and its partner Tekmindz revolves around the need to simplify and extend the use of analytics

Vikram Kole, COO, MAIA Intelligence began his presentation by sharing some data. “Enterprise data has been captured in organizations for a long time but very little of that is analyzed and used: according to a survey, only 15-20% user adoption happens for BI solutions.”

“So how can you channelize an effective BI strategy – is it just the four walls (internal) or external data as well?” he asked the audience.

According to Kole, the management is usually the first to be presented with data, reports, etc. However, that is changing: with the volume, velocity and variety of big data coming into the picture, users at various levels are being presented with data to act upon.

In a customer-centric organization, he said, information should be available to users at various levels for decision making — employees, partners, customers...all want data in their hands (besides top management).

“One needs to look at a strategy where each of these can be utilized for an enterprise-wide BI strategy,” he suggested.

As part of MAIA’s presentation at Technology Senate, Gyanesh Thakur and Saurabh Verma from Tekmindz, a solution partner of the company, also shared their views.

Thakur likened what Tekmindz does to doctors: Like doctors who must ask multiple questions on how the ‘patient’ is feeling, he said, “At Tekmindz, we probe



Vikram Kole

the customer for problems and provide the solution based on their needs.”

Verma shared a detailed profile of the company and gave details on how they are working on some path-breaking projects in several countries, including Nigeria (immigration service).

Talking about the solutions, he said, “We work for industry-specific KPIs for analytics, such as the m-wallet solution in Africa and mobile device management for the police force.”

## Driving Business Value through IT

The panelists in this discussion assume separate 'CIO types' and share their views on how they drive business value, measurement metrics and much more



(L to R) Sunil Sharma, Vice President – Sales and Operations, India and SAARC, Cyberoam; Arun Tewary, VP – IT, Emirates Flight Catering; Prasad Dhumal, Senior Director – IT, South Asia, DHL Express; and Renu Rajani, Senior VP, Citigroup Global Technology Resource Strategy (Moderator)

**R**enu Rajani, Senior VP, Citigroup Global Technology Resource Strategy, who acted as the moderator for the discussion modeled it along different types of CIOs and how they work (based on an IBM survey). So, there are four basic types of CIOs: transform (who keep the lights on, save costs, etc.); leverage (who take more initiatives and work more closely with business); pioneering (more high tech, more innovation); and expand (mainly working in fast growing organizations).

For the purpose of the discussion, Rajani identified herself as the

'transform' CIO, Dhumal was labeled 'leverage', Tewary 'expand', and Sharma was designated 'pioneering'.

Sharing his perspective, Prasad (leverage) said, "We cannot run the business without partnering with customers. So we take what we call the 'net promoter approach' — live feedback from customers on service." When the captured feedback goes to IT internally, they see the gaps, see what's missing, and then think what can be done.

According to Tewary (expand), he looks at growth indicators such as the number the employees that have been

added and constantly seek answer to the question: What business value does IT drive?

Sharma (pioneering) shared his experience of working in the distribution field. Citing one example, he said that the company's partners used to complain about preferred pricing and many of them were dissatisfied, which harmed business. "By implementing a software that locks the deal — who locked in first on a particular deal," he said, Cyberoam resolved the issue amicably. "Small innovations can lead to great results," he said.

Rajani (transform) shared an interesting statistic: citing a survey, she said that in banking, 33% CIOs say they spend effort on transformation. So the question that needs to be asked: Are we paying for premium rates without getting premium work?

Tewary had some radical views to share. On the question of how he managed change, he quipped, "First I took the CFO out of the equation!" However, on a serious note, he said that transparency in work is very important and everyone in the organization should understand how they are going to be affected by a new system or change. "We need to talk in the user's language rather than IT jargon," he emphasized.

The panelists also shared how their respective organizations measured the success of their IT initiatives and efforts. Prasad, for instance, said that they use internal and external dashboards. In the former, they have internal benchmarks, e.g. every customer call should be picked up in three rings, what percentage of deliveries were on time, etc. External dashboards involve surveys of customers and keeping tabs on whether the customer is satisfied or not. In their 'net promoter approach,' customers rate the company on services. "The voice of the customers tells us if we are on the right track or not," he said.

On a different note, Tewary said that he doesn't believe in metrics. "Yes, surveys and metrics are tools for intermediate things, but if you can deliver the end results, then your job is done," he said.



## Security Policy for an Increasingly Open World

The panel on security looks at the dilemmas faced by CISOs and organizations in defining and enforcing an effective security policy, especially in the wake of trends such as BYOD

Warrier set the tone of the discussion by asking the panelists how they view the need and importance of a security policy in an organization.

Sharing his views on the importance of a well-defined security policy, Mishra said, "Having a security policy helps deal with the unknown better. If there is a change in the way of working and something comes up, the organization is able to deal with it better."

According to Kalra, the two most ignored subjects of discussion today are security policy and the management. He said that security must be viewed as an enabler to business. Twisting the acronym BYOD to mean 'Bring Your Own Threat', he said that while the subject of policy is an organizational issue, any security policy cannot leave the user behind. So unless the end user is involved in the process, it would not serve any purpose. However, the policy has to be owned and facilitated by the company.

Mishra further said that policy is something that uses processes together to run the organization. "It is very important that the 'current-ness' of the policy is maintained. We are talking



(L to R) Satish Warriar, CISO, Godrej Industries (Moderator); Ashish C Mishra, CISO, Tesco Hindustan Service Center; Niranjana Bal, CISO & PMO, Hindalco Industries; and Harmeet Singh Kalra, Head, Strategic Accounts, Check Point Software Technologies

about the blurring of mind and the logical and physical boundary of work and mindset."

According to the panelists, the most important element here is the people for whom the policy is being created. The workforce today is quite young and companies need to have a proper risk assessment that tells you how a policy is configured.

Bal of Hindalco said that there has to be some kind of code of conduct for the workforce, as the younger staff are more savvy. "The more you stop them the more they try to break a system," he said. One needs to motivate them to do the right thing in a positive rather than negative manner.

Kalra said that a good security policy should take care of 80-85% of the issues and allow administrators to focus on the rest.

The panel agreed that even if one has a defined security policy, there are several challenges in enforcing or implementing it. Most companies or CISOs have the same dilemma in terms

of these questions: Where do you draw the line? What impact can it have on the business if there are incidents or breaks in the policy?

In addition, the tone of the policy should be set so that in case any incidents do happen, they are not encouraged in future. There should be measures, penalties, etc. at least in case of repeat incidents (when negligent rather than deliberate). In fact, erring employees should become some sort of champion in the organization by telling others what not to do or what to avoid.

In response to a question from Sanjay Rao of SRF as to what can organizations do to ensure security in the larger ecosystem (taking care of partners as well), Warriar said that it's a trade-off between convenience and security. "One must understand the impact of a breach and that should define what security measures are taken. Also, it is a question of awareness and making the partners and customers aware of the implications as well."

## Relevance of Current Standards in the Enterprise Data Center

The panel discussion addresses the question: How important is certification in data centers, especially when majority of the companies are either outsourcing or consolidating their services?



(L to R) Satish Vishwanathan, VP – Pre-Sales and Products, NxtGen Data Center; Sayed Peerzade, VP – Technology, Reliance Entertainment – Digital; Ashwin Khorana, CTO, ING Vysya Bank; KK Chaudhary, Group Head – IT, Lanco Infratech; Syed Hassan, Head – IT, Britannia Industries; and Shaheen Meeran, MD, Schnabel DC Consultants India (Moderator)

Day Two's last panel discussion began with Shaheen Meeran, MD, Schnabel DC Consultants India, who was also the moderator, commenting on the standards of data centers that have evolved in the past. "If you look at the scope of this discussion, what has happened over the last 18-20 years is that there has been lot of guidance and standards owing to availability of data centers. There are

definitions by Uptime institutions etc. We have also seen lot of focus related to inefficiency and energy efficiency in data centers. Data centers guzzle about 1.2 – 1.5% of power generated in the world and a lot of metrics have begun to be defined especially around efficiency or I may say the lack of efficiency around data centers. So, given this problem of plenty if I were to pose this question to you, how does your organization work in achieving

these standards," she asked the panelists.

Syed Hassan, Head – IT, Britannia Industries Ltd., said, "We started from standalone servers and now we are hosting servers in our premises, then we have moved these in between ASP model (application server model) and graduated up to outsourcing it and moving it to data centers. At this point, however, if you ask me if the standards are relevant, then I would say, of course they are relevant. We should be under certain tier for our data centers to hold our mission critical data. But personally, in spite of this journey of years I don't feel if I am getting the value for my money."

KK Chaudhary, Group Head – IT, Lanco Infratech however, differed in opinion, saying, "The economy of scale that we just spoke about, when you consolidate your data centers or different data centers into one etc., what is very essential at this point of time is the element of assurance that it is as per the methodologies written and defined by the experts."

Certifications also add value to the kind of assurance. What organizations have to take care of though, is that the certifications which are taken are not just mere check list taken from some audit reports.

Ashwin Khorana, CTO, ING Vysya Bank however said that he is not a fan of certification and does not believe in these. "There are many reasons for it. When the Indian industry started to grow on services, the speed at which all the companies got certifications was phenomenal; 200 in 2.5 years. It is said that certifications needs to be in spirit and not audit check list that we need to pass," he asserted.

We often ask ourselves, how can data centers be made more efficient, scalable, flexible and secure? Specifically, how can IT service providers achieve lower construction costs, a PUE nearer 1.0, more computing power per watt, lower latency for users, a smaller carbon footprint — and above all, how can they manage these complex systems better? But is certification the answer to most of these questions we are yet to ascertain, the panelists concluded.



## DIGITAL SERVICES EFFICIENCY

Shekhar Dasgupta, Founder & CEO of GreenField Software, shares insights into the Balanced Scorecard on enterprise performance and relates how the next big trend is to monitor digital efficiency



Shekhar Dasgupta

Dasgupta began his session by discussing the need for various enterprise scorecards that have emerged over the years based on financial goals, revenue, cash generated, etc. Then he related how a clinical psychologist designed the first scorecard beyond financial parameters to measure process and system efficiency.

However, the scorecard approach in enterprises really took off with the introduction of the Balanced Scorecard. "Today, most ERPs have Balanced Scorecard as part of the business intelligence dashboard," he said.

Developing the concept further, he said, came the need to analyze questions such as these: On what basis should CEOs and top executives in a company get their bonuses and perks? What are the real benchmarks for effectiveness, especially in an increasingly digital world?

Dasgupta revealed that it was Dean Nelson from eBay who devised what is

called the DSE dashboard to measure the digital services efficiency of an organization ([Tech.ebay.com/dashboard](http://Tech.ebay.com/dashboard)). The good thing about DSE, he said, is that it can be plugged into the existing Balanced Scorecards that many organizations already have in place.

The initial question that Nelson sought to answer for eBay was: How did the company make money through small transactions by spending big time on setting up huge infrastructure? Not different from what many e-commerce companies and other digital organizations continue to face today.

Today, the next generation solutions in DCIM (data center infrastructure management) can give the DCE dashboard to arrive at granular cost measurement across the entire IT infrastructure, said Dasgupta. Using such solutions, companies such as, say a bank, can answer a question like: Is the car loan business a profitable one from the IT infrastructure point of view?

Needless to say, high time enterprises had a solution like that.



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# AND THE WINNER IS...

## INTELLIGENT ENTERPRISE AWARD WINNERS

**KNC Nair**, Group CIO, Muthoot Group (BFSI); **Girish Rao**, Head – IT, Marico, (RETAIL & CONSUMER PRODUCTS); **Vivek Khanna**, CIO, Havells (MANUFACTURING); **S Ramasamy**, Executive Director (IS) IndianOil Corporation, (OTHERS/ MISC); **Rajiv Sharaf**, Senior VP – IT, Reliance Infrastructure (REAL ESTATE & INFRASTRUCTURE)



KNC Nair of Muthoot (right) receiving the award from K Bhaskar, Senior Director, Office Imaging Solutions Division, Canon



Girish Rao of Marico receiving the award



Vivek Khanna of Havells, during his presentation to the jury



S Ramasamy of IndianOil receiving the award



Parag Adarkar of Reliance Infrastructure receiving the award on behalf of Rajiv Sharaf



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### SECURITY STRATEGIST AWARD WINNERS

**Niranjan Bal**, CISO & PMO, Hindalco Industries, (MANUFACTURING & INDL. PRODUCTION);

**Onkar Nath**, CISO, Central Bank of India, (BFSI);

**Naresh Pathak**, Head – IT, Sentiss Pharma, (OTHERS/ MISC)



Niranjan Bal of Hindalco Industries (right) receiving the award from Kapil Awasthi, Security Consultant, Check Point Software Technologies



Onkar Nath of Central Bank of India with the trophy



Naresh Pathak of Sentiss Pharma with the trophy

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### UPTIME CHAMPION AWARD WINNERS

**Sharad Sadadekar**, CISO, HDFC Life, (BFSI); **Atul Malhotra**, Director – IT Infra. & Internal Apps, Sistema Shyam/MTS, (TELECOM); **Vinod Gupta**, Senior GM – IT, JK Paper Ltd, (MANUFACTURING); **Manoj Kumar Mittal**, Head – IT, Aegis Logistics Ltd, (OTHERS – EDITORS' CHOICE)



Atul Malhotra of MTS (left) receiving the award from A.S. Rajgopal, MD, NextGen Datacenter & Cloud Technologies



Sharad Sadadekar after receiving the award



Manoj Kumar Mittal of Aegis Logistics sharing his experience on winning the award



Vinod Gupta of JK Paper receiving the award



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# THE JURY'S DAY IN

Meet the jury members, the senior CIOs from across sectors, who deliberated on the presentations by award nominees—and came up with winners



Left to right: Vijay Sethi, Hero MotoCorp; Rajesh Uppal, Maruti Suzuki; Tamal Chakravorty, Ericsson Global Services; Vipin Kumar, Escorts Ltd; and Rajesh Chopra, Oberoi Hotels. They met in Delhi to adjudge nominees for Intelligent Enterprise awards



Left to right: Shirish Gariba, Drive India Enterprise Solutions (Tata Group); Satish Warriar, Godrej Industries; Sunil Mehta, JWT; Shailesh Joshi, Godrej Industries; Anil Nadkarni, Thermax; Pratap Gharge, Bajaj Electricals; Girish Rao, Marico; and Satish Pendse, Highbar Technologies (HCC Group). They met in Mumbai to adjudge nominees for Security Strategist and Uptime Champion awards

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## STRAIGHT FROM THE DELEGATES



*Express Computer* sought some feedback from a few CIOs and IT decision makers who attended this year's event at Abu Dhabi. Here is what they told us

**It was a good change from our usual routines. We could spend some time in leisure and at the same time, got to improve our knowledge about the latest trends in technology in various domains.**

**KNC NAIR**, GROUP CIO, MUTHOOT GROUP



It was overall a very good trip—very well planned.

**VIPIN KUMAR**,  
GROUP CIO, ESCORTS LTD

I truly appreciate the hard work of the entire team. In terms of the conference, I really felt that the speakers who were chosen for individual sessions and panel were very informative and I take away a lot of learning and experience. Also, the network I could establish with the few people whom I always wanted to meet has been truly useful.



**SYED HASSAN**,  
HEAD - IT, BRITANNIA

**It was a tremendous experience. I attended the Technology Senate for the first time. All the sessions were very well organized. Overall, the program was well organized.**



**JOYBRATA MITRA**,  
CIO, DAIKIN INDIA



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The event was quite balanced in how the content was structured. The panel discussions were good but there should have been more involvement from the audience. Some of the presentations were quite awesome.

**V RANGANATHAN IYER,**  
GROUP CIO, JBM GROUP

**In particular, I found the panel discussions to be good as you get to hear different perspectives from the CIOs on topics that are current and how they are tackling the challenges in those new areas.**

**PRATAP GHARGE,**  
PRESIDENT & CIO, BAJAJ ELECTRICALS



I am in the technology strategy function and here I got to meet all the CIOs, which was a great networking experience. Thank you so much for the opportunity. I'll come back again.

**RENU RAJANI,**  
SENIOR VP, CITIGROUP GLOBAL TECHNOLOGY  
RESOURCE STRATEGY



**I have attended several Tech Senates and this too was as good as the previous ones. I got to meet a lot of friends through the good networking sessions, coupled with a good value addition in technical terms. I look forward to the next one.**

**SATISH PENDSE,** PRESIDENT, HIGHBAR TECHNOLOGIES (HCC GROUP)



# THE CLOUD JIGSAW

In spite of the presence of many industry bodies and associations for formulating standards for cloud computing, CIOs in India are apprehensive of interoperability and migration issues

**BY PANKAJ MARU**



**C**loud computing has been growing steadily across the globe, including India. Enterprises and organizations have adopted cloud in different ways based on their business models, needs and financial imperatives.

However, there are multiple concerns and doubts over cloud standards. CIOs are worried whether they will be able to switch from one cloud provider to another, migrate data safely to and back from the cloud, shunt between public, private and hybrid clouds, etc.

Express Computer takes a look at some of the prominent standards bodies and alliances on cloud computing and asks experts and CIOs about the

prevailing concerns.

According to a Technical Note titled The Role of Standards in Cloud-Computing Interoperability by Grace Lewis of Carnegie Mellon University's Software Engineering Institute, there are several cloud standardization projects. Some of these projects focus on standardizing parts of a cloud-computing solution such as workloads, authentication, and data access. Other efforts focus on standardizing how the parts should work together as a solution. The Cloud Standards Coordination Wiki maintains a list of some of these projects ([cloud-standards.org](http://cloud-standards.org)).

Let us briefly look at some of the

efforts related to cloud standardization, interoperability and security:

## **DISTRIBUTED MANAGEMENT TASK FORCE (DMTF.ORG):**

An industry body formed in 1992, the organization's board comprises representation from 17 companies, including AMD, Broadcom, Cisco, EMC, Fujitsu, IBM, Intel, Microsoft, Oracle, VMware and others. DMTF's Cloud Management Initiative is focused on developing interoperable cloud infrastructure management standards and promoting adoption of those standards in the industry. There are several working groups under the



initiative, all working toward achieving interoperable cloud infrastructure management between cloud service providers and their consumers and developers. Previously, among others, DMTF has developed the OVF (Open Virtualization Format).

**CLOUD STANDARDS CUSTOMER COUNCIL (CLOUD-COUNCIL.ORG):**

Formed as a group under the Object Management Group, a US-based non-profit trade association, its mandate is to “separate the hype from the reality on how to leverage what customers have today and how to use open, standards-based cloud computing to extend their

organizations.” It is an end-user advocacy group that aims to accelerate the successful adoption of cloud. Besides complementing existing cloud standards efforts, it shares best practices, patterns, case studies and standards roadmaps. Its founding members include IBM, Kaavo, Rackspace and Software AG.

**INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE.ORG):**

The world’s largest association of technology professionals, Eye-Triple-E (as it is called) needs no introduction. The institute, under its Cloud Computing Standards Committee, has developed

what are known as IEEE P2301 and IEEE P2302. The former refers to the Guide for Cloud Portability and Interoperability Profiles (CPIP) and the latter to the Standard for Intercloud Interoperability and Federation (SIIF). These seem to be still evolving, as on its website, the institute is inviting people to get involved in their development.

**CLOUD SECURITY ALLIANCE (CLOUDSECURITYALLIANCE.ORG):**

As is evident from the name, the mission of this association is “to promote the use of best practices for providing security assurance within cloud computing, and provide education on the uses of cloud



CIOs need to expand their thinking and approach beyond traditional IT when it comes to the cloud by being open, nimble and flexible.

**Kathy Grise,**  
Future Directions Senior Program  
Director, Technical Activities, IEEE



Organizations will need to implement a hybrid delivery strategy that leverages the right mix of cloud and traditional IT.

**V Ramachandran,**  
Country Manager, Converged  
Infrastructure & Cloud Solution, Cloud  
Systems, HP India

computing to help secure all other forms of computing.” A non-profit, member-driven organization, it is believed to be working on Version 3 of the Security Guidance for Critical Areas of Focus in Cloud Computing.

#### **OPENSTACK (OPENSTACK.ORG):**

Often cited as the de facto standard for building open-source clouds, it is supported by over 150 companies that have contributed to or adopted the platform in various ways. According to the OpenStack website, its goal is “to produce the ubiquitous open source cloud computing platform that will meet the needs of public and private cloud providers regardless of size, by being simple to implement and massively scalable.”

With these and many more efforts in defining or propagating cloud standards and interoperability, it would seem that all is well in the world of cloud computing. But that is not so. One reason is that multiple efforts are creating either confusion or complexity in the market. Another could be that there are vested interests of large vendors in supporting or pushing one standard or practice over another. Further, being still nascent in terms of wider and deeper adoption, especially in hybrid and private clouds, we are yet to see the full implications of cloud interoperability.

According to Kathy Grise, Future Directions Senior Program Director, Technical Activities, IEEE, “It requires a broader perspective to take into consideration, the concerns and issues behind whether or not one cloud service or application provider can ‘interoperate’ with another. That’s where a standard is critical to establish and gain acceptance, which benefits not just the service and application provider, but the consumer.”

She however adds that developing standards is a time-consuming, lengthy process. “Once a standard is published, it also requires acceptance and adoption. Good examples of active standards and interoperability work can be seen from the U.S. based NIST (National Institute of Standards and Technology) and the formation of the Cloud Computing Innovation Council for India (CCICI)

recently. Both demonstrate efforts promoting standardization and interoperability,” she says.

#### **Areas of concern**

According to Jayantha Prabhu, CTO, Essar Group, the industry is feeling the adverse effects of having no established contextual standards to assist the integration of cloud services into existing IT infrastructures, to support the exchange of information between different clouds, or to allow swift procurement and contract negotiation.

“Cloud computing is following the technological standards but standards are needed for interoperability, cloud service and service level agreements (SLAs), common management and policies; concerns over data security are critical,” he says.

Shiva Shankar, Group CIO, AM International Holdings Pvt. Ltd., believes that standards are a concern area in cloud. “The cloud is evolving and I am sure in the next couple of years the standards will fall in place. Today, there are Tier-1 to Tier-3 service providers but standards are not prevailing across the industry or understood well.”

Shankar shares concerns other than standards and security. “There is lack of licensing policy to support the cloud model and for taking enterprise applications onto the cloud,” he says.

Explaining the role of ISVs (independent software vendors) that offer cloud-based products and services, he says, “In recent times, the ISVs are coming up with cloud-based products and services but the service providers have still not come forward with appropriate solutions for critical domains like BFSI, telecom or manufacturing. And that is the route for most CIOs to go.”

Grise of IEEE offers some advice to the CIOs trying to embrace the cloud. “I think CIOs need to expand their thinking and approach beyond traditional IT when it comes to the cloud by being open, nimble and flexible. They need to adopt cloud solutions that may comprise a combination of private, public and hybrid solutions.” She also emphasizes the need to collaborate with others to ensure interoperability.



Many Indian CIOs are already mixing and matching the cloud with their own IT environment. For instance, Mumbai-based Essar Group uses both private and public clouds: the private cloud is built in-house using Microsoft HyperV, VMware and Citrix technologies, while the public cloud runs with the help of Microsoft Azure and SAP SuccessFactor. Similarly, Chennai-based AM International Holdings, too, has opted for private and public clouds in different portions. What's more, as a part of its overall IT strategy, the company is working on consolidating the infrastructure and offering the same on an Infrastructure-as-a-Service (IaaS) model to its group companies.

According to Shankar, lack of standards could hamper cloud adoption and could limit interoperability among cloud platforms, causing inconsistency in areas such as security. He feels that it would result in restrictions in interoperability between a private and a public cloud or between portability of services from one provider to another.

"As more and more players are coming in, I see interoperability as a point of concern. But for the cloud to be successful, it cannot remain that way for a long time. The adoption of PaaS and SaaS is falling in place but not at the pace of IaaS," he says.

In his opinion, the issues around security, standards and interoperability will limit enterprises going to public cloud compared to private cloud, especially in the IaaS segment—where the adoption is growing amongst all lines of business, be it through partners or managed in-house.

Besides those concerns, the age-old complaint of vendor lock-in continues to play on CIOs' minds even in the new era of cloud computing. "Customers do not want to be locked into a single cloud provider; they would like the freedom to move between clouds, ideally from public to private and back again. This would give customers the freedom to switch providers as their computing needs grow or shrink, and the ability to move applications and workloads around as their business requirements change," points out Prabhu of Essar.

On their part, vendors are becoming sensitive to the issue and participating in efforts aimed at open cloud computing.

HP, for one, is one of the largest contributors to the OpenStack framework, touted as the fastest growing cloud standard. Says V Ramachandran, Country Manager, Converged Infrastructure & Cloud Solution, Cloud Systems, HP India, "We see the larger picture for interoperability and investment protection between traditional IT infrastructure products and devices introduced for the cloud enabled world."

Ramachandran believes that organizations will need to implement a hybrid delivery strategy that leverages the right mix of cloud and traditional IT to optimize application, service creation and delivery.

He agrees that from an enterprise perspective, organizations are experiencing the impact of lock-in and want "greater democratization" of cloud. He is of course, quick to claim the company's Converged Cloud offerings as the remedy for them. These, he says, provide enterprises "the essential foundation of technologies and services to confidently build, operate and consume IT across private, managed and public clouds."

Other vendors in the cloud fray make similar claims. But it still remains to be seen how the CIOs in India test those claims and come to grips with the problems they are likely to face in their day-to-day cloud journeys. There's a strong feeling among CIOs that vendors need to focus and work hard on establishing standardization rather than give marketing spiel.

"I personally believe that there is a lot to be proved by cloud technology. This implies that cloud technology providers should emphasize or rather work more toward its standardization rather than plunging in the market for attracting customers. This results in complete chaos that actually demerits cloud technology which I feel, is very unfair," opines Prabhu.

The cloud story is just beginning to unfold. Watch this space.

pankaj.maru@expressindia.com



Customers do not want to be locked into a single cloud provider; they would like the freedom to move between clouds.

**Jayantha Prabhu,**  
CTO, Essar Group



As more players are coming in, I see interoperability as a concern. But for the cloud to be successful, it cannot remain that way for long.

**Shiva Shankar,**  
Group CIO,  
AM International Holdings

# HOLIDAY PLANNING MADE SMOOTH

With its web traffic spiraling upward every day, HolidayIQ.com was finding itself in a fix on how to handle it. Here is how it resolved the problem with Akamai's Aqua Web Experience solution

**BY JASMINE DESAI**

**T**he months of December and May always posed a problem for HolidayIQ.com, when traffic on the website traffic would reach its peak. A holiday information portal enabling holidaymakers and tourists to plan and share their experiences online, HolidayIQ.com is accessed by about 5 million Indian travelers every month for planning their trips. In 2012, it generated business opportunities worth Rs 2,500 crore with partner hotels and travel agents.

It was in September 2012 that the organization started feeling an urgent need to address the issue of traffic surge.

The traffic was growing 15-20% month on month. Presently, the volume of data generated on a daily basis reaches up to 16-18 GB. Says Amit Shrivastava, Senior Vice President, HolidayIQ.com, "We started looking for ADC (Application Delivery Controller) solution to help us offload some of our static media content delivery system, to scale up our user experience performance." However, from a usability point of view and performance of the site, they thought it best to go with a CDN (Content Delivery Network), because of its much broader server network and local presence. HolidayIQ being based in Bangalore, wanted to have

local servers to boost user performance in terms of speedy response time. HolidayIQ.com had three to four Linux-based servers which catered to their users. These servers were hosted at Reliance data centers in Bangalore. Presently, the organization has shifted to a Netmagic data center.

HolidayIQ.com is a very content heavy site and around 80-85% of data is user generated content. They wanted to offload all captive content based on user feedback onto the CDN and had only one specific criteria while scouting for a vendor. Mentions Shrivastava, "We wanted a vendor whose solution fitted





# 5 million

Indian travelers access HolidayIQ.com every month for planning their trips

# 16-18 GB

the volume of data generated on a daily basis

Indian market perfectly. In terms of pure content delivery network, we did consider data centers like AWS. But Akamai had lot of Indian presence and local servers.” Thus, began the implementation process for Akamai Aqua Web Experience Solution. Aqua Web Experience solution is designed to address the challenges of end users accessing online portals from across various devices. It is built over the Akamai Intelligent platform. This is a globally distributed platform of more than 120,000 servers, spread across 1,100 networks in about 80 different countries.

### For an enhanced user experience

The Akamai Intelligent platform was able to ensure that 90% of HolidayIQ.com’s customer site traffic was delivered from the Akamai edge servers, which resulted in cost savings as far as origin bandwidth was concerned. There has been an origin bandwidth offload of 93%. In addition, this channeling of traffic resulted in 100% site availability with no downtime. In comparison, if each request had to go through the customer’s origin this would have amounted to additional investment for bandwidth. The data is with HolidayIQ.com. Akamai’s solution helps in rendering data. HolidayIQ has set of

media servers that Akamai has been given access to. the CDN is integrated in the solution itself. It stores, caches and renders the data and then gives it to users. At each user module, the experience can be catered to much faster because of this solution.

The implementation process took around two months. Mentions Shrivastava, “The major task for us during implementation was aligning our media access layer to render all content delivery files like images, videos etc. and tweak it, for which we had to test at the Akamai module server.” If you look at any of images, they come from a certain



domain which is a dedicated URL that is kept aside for the purpose. All these static files have to be released to these domains. Even the rendering part had to come from these domains. All of traffic rendering is taken care by the CDN systems. The site can now scale up from the existing infrastructure without any hassle. The implementation went very smoothly and due to it, users can now view the site much faster, in spite of larger page-sizes. It is a relief for the organization that for around next one year, they do not have to make any additions to their existing infrastructure. Post-implementation, the website saw an increase in performance with site traffic having doubled within three months of implementation.

Speaking on the implementation, Shrivastava says, "The most exciting thing about this solution is the whole image rendering system. Images usually took a lot of bandwidth, which is not the case now. In that particular area, we have seen the solution working really well. Unless there is a local CDN server, the process would take a lot of time."

Every organization or website has their own typical problems. Since HolidayIQ.com is a content-heavy site, majority of the content is offloaded to these servers. There are always preliminary precautions that everyone



The most exciting thing about this solution is the whole image rendering system. Images usually took a lot of bandwidth, which is not the case now.

**Amit Shrivastava,**  
Senior Vice President,  
HolidayIQ.com

takes before implementing such critical solutions. Shelling out some advice on it mentions Shrivastava, "Organizations looking at adopting such solutions should carefully evaluate the kind of solutions they need. Organizations should identify two or three critical problems and then look for an infrastructure solution which could be CDN, more servers, more CPU etc." Some of these content delivery solutions might not be able to gel well with the static content, where there is a lot of streaming on a day-to-day basis. HolidayIQ.com is a static site so this particular solution works very well for them. But for e-commerce sites where there is a lot of inventory and transactions happening on a real-time basis, more advanced and dynamic solutions are a better fit. These solutions will not only render, but also process the request.

HolidayIQ.com is gearing up for more ambitious plans to build up on the Aqua Web Experience Solution. Next on the agenda is the plan to leverage the ubiquitous mobile platform. Its user base in mobile is escalating consistently with 35% of traffic coming from the mobile platform. So it is looking at a solution from the mobile content delivery network perspective as it has to be even faster than the existing one.

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**AKASH MAINRA**  
BLACKBERRY INDIA

*In a conversation with Heena Jhingan, Akash Mainra, Business Lead - Large Enterprise, BlackBerry India, discusses the company's strategy to tap the enterprise segment*

## “We have taken BYOD heads on”

**Amidst all the split acquisition stories doing the rounds, what do you think happens to BlackBerry's enterprise business?**

We are hearing all sorts of versions too. To set the record straight, the CEO has published an open letter to the customers and partners ensuring them that they can rely on us. In a nutshell, we are focused on taking BlackBerry (BB) forward in enterprise market. The entire portfolio is now being developed around that. We are glad that customers continue to invest in us, which is evident from the fact that our closest competition in enterprise offering has about 5000 installations, while we are talking of 25,000 deployments of BES5 worldwide.

Macro changes in the company definitely impact a company's strategy. We have been working on the BES platform for about last 13 years. We can manage about 550 IT policies. It is easy to manage 10 to 15 devices and applications on them, but when we talk about applications for the masses no one can match our levels of security. The enterprises are now getting open to giving the users a choice of what devices they carry. We have taken BYOD heads on. We have evolved our product line to be able to capitalize on the shift.

Typical hygiene requirements for managing a BlackBerry and non-BlackBerry device remain the same as — enabling, managing, configuring and securing them. With BES10, we are now able to extend the same level of security and manageability to non-BlackBerry devices. We are now working on extending it to Windows as well. The BES10 also has a built-in enterprise app store. What customers love is the complete Data Loss Prevention (DLP) it offers.

Another thing that differentiates us from the others and something that our enterprise customers like is how we use the native OS and User Interface (UI) of the device. If you look at a couple of other MDM technologies out there, you will find their propriety UI, which is not a good thing. It defeats the purpose of BYOD.

**Please tell us about BES10 adoption in India.**  
In India, we have already had over 500



**The focus is shifting from device management to application management. How prepared are you to deal with this in the BYOD environment?**

**When we look at the applications and devices in BYOD environment, we find the greater challenge is around IT policy and not a technology. BES10 is already powered to handle such situations, where there is a complete demarcation of corporate and personal application, the screening of this can happen at the organizational level.**

deployments of BES10. The largest of ITeS, Financial and FMCG companies have deployed BES10, in fact a lot of mid sized companies, like construction houses and hotels are using the solution. Somethings have gone very well for us in terms of positioning our Mobile Device Management component with BES10. Selling our MDM solution has been easier because as customers evolve from BES5 to BES10, the moment they install BES10 half the battle is won as what now remains to be done is to simply switch on the MDM features.

In times when the capex is really tight, the early adopters of BB10 have been very senior executives, leading to the need of managing their BB10 devices. This resulted in their organizations upgrading to BES10, this has helped us sell MDM faster. The first movers to MDM solution are mostly the ones driven by compliance like the financial institutions.

**Are there cases where BES10 is used to manage environments that are dominated by non-BB devices?**

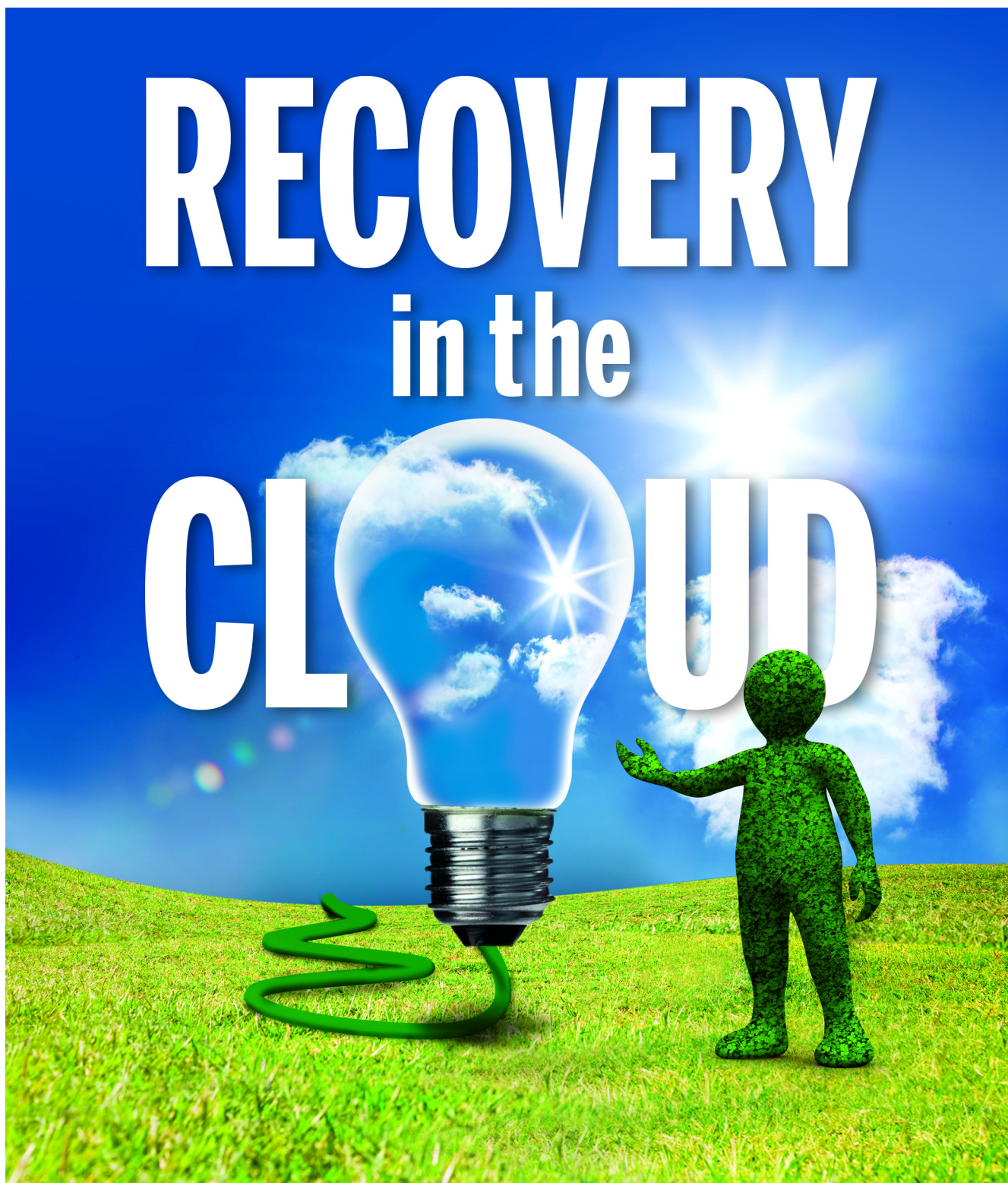
You walk into any enterprise, de facto, there would be a mix environment of BlackBerry, Android and iOS devices. In some cases it will be BB dominant and in some it will not be, depending on the customer. Today, if a CIO needs a device management system, these OS will have to co-exist. In many cases they might have BES5 or BES Express, so they don't want a separate system to manage non-BB devices.

Another factor going in favor of our solution is that it offers VPN-less security. BB10 architecture is always on, always connected. To access secure data, one needs to connect to VPN (Virtual Private Network), typically the VPNs are made for desktops and not smartphones. The connection is not always on, however, in our case, it is always on, always connected, after a single sign in. Besides, it is not good for an organization to have hundreds of VPN connections coming from the outside. Architecturally, I think we have an advantage.

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# RECOVERY in the CLOUD



## Luminous readies itself for disaster contingencies by implementing IBM's cloud-based server recovery solution

**BY HEENA JHINGAN**

**“A** stitch in time saves nine” was perhaps the very thought that prompted the power back-up solution provider Luminous to invest in a disaster recovery solution. The company that claims to be striving for performance beyond compliance was on the look out for a DR solution not for the sake of audit purposes, but in order to stay better prepared for possible business disruptions.

Until recently, DR capabilities were available mostly to large enterprises. But they are now within bounds for even small and medium enterprises like Luminous as well.

According to Chander Khanduja, CIO, Luminous, the need for uninterrupted business operations has become crucial for enterprises to ensure enhanced customer engagement and protect critical business data.

“Our intent to deploy the solution was clear right from the beginning, we never wanted a solution for the sake for it, instead we needed a robust solution to rely on for recovery of critical applications,” he says.

Khanduja believes that the market is full of disaster recovery solution options, but to find the right one to meet the specific requirement can be challenging. So at Luminous, they defined their requirements and set three important parameters based on which they would choose a solution.

“In our sector, we are a strong player in terms of presence and brand name, and we could rely on a vendor that was equally strong,” he says, adding that they

wanted a solution that was opex-based and easy to deploy. “IBM’s SmartCloud Virtualized Server Recovery (VSR) seemed to offer most of everything that was on our list,” he says.

Luminous considered three other players in the market that offered DR in various forms — DR on a dedicated model, on premise and cloud. However, since DR as a service was a Luminous’ priority, they decided to go with IBM’s solution.

### Preparing for disaster

Luminous moved most of its critical applications including ERP, CRM, bar coding and financial systems on the IBM solution and at present, it has eight servers running on DR.

Traditionally, setting up DR has not been such a simple thing as it was in the case of Luminous. Khanduja explains that in many cases, the applications need to be deployed all over again, but with the IBM solution they did not have to do any of that.

He feels that IBM VSR is a complete disaster recovery service package that helped them to not only provision recovery resources in minutes but also avoid errors associated with manual operations.

“The recovery was seamless and we could continue with our business operations without any disruption; there was no downtime required at the primary site,” he elaborates.

Generally, in a DR set up the Recovery Point Objective (the maximum tolerable period in which data might be lost from an IT service due to a major incident) and



The recovery was seamless and we could continue with our business operations without any disruption; there was no downtime required at the primary site.

**Chander Khanduja,**  
CIO, Luminous

Remote portal access helps monitor and manage the RPOs and RTOs while reducing the inconvenience of traveling to the recovery site





Cloud-based DR saves opex, which makes the implementation cost-effective. More importantly, it is faster, easier to deploy and saves the IT manager the botheration about heterogeneous hardware in the IT structure.

Recovery Time Objective (the duration of time and a service level within which a business process must be restored after a disaster or disruption) can be very high. In some cases the RTOs could go up to 2-3 hours, which is not a good thing for businesses, more so if it's about mission critical applications. However, the IBM solution delivered much lower RTOs as compared to the other solutions that Luminous had considered, says Khanduja.

He adds the IBM VSR service helped them improve server recovery time and reliability. Luminous leveraged the automation and cloud tools offered by the service to minimize the risk of failure due to disparate hardware at the production data center.

Khanduja feels since the solution provides remote portal access, the managers can monitor and manage the RPOs and RTOs through it, this helps businesses reduce cost and time as well as the inconvenience of traveling to the recovery site and bring in greater efficiency in the long run.

### Expanding the cover

Luminous now plans to expand its DR footprint. The company's IT team will be focused on devising plans that can help them take more applications onto the DR setup.

Khanduja informs that they are constantly working on ramping up their customer facing application to offer better user experience and service.

"We are experimenting with new capabilities and mobile based applications; we will have more customer centric applications being moved to the DR environment," he says.

One thing that Khanduja is certain about is that DR for them is going to remain cloud-based, as it saves opex, which makes the implementation cost-effective. More importantly, it is faster, easier to deploy and saves the IT manager the botheration about heterogeneous hardware in the IT structure.

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**T.G. SURESHBABU**  
HP INDIA

*T.G. Sureshbabu, Director, Customer Support and Services, HP PPS India, discusses HP's service evolution and its support mechanisms for SMEs with Mehak Chawla*

## “SMEs represent a growing segment for HP”

### What are HP's focus areas when it comes to providing support services to enterprises?

Firstly, we try to understand what are the enterprise needs today with respect to levels of service. There are three key concerns that we see with respect to enterprises. They like their IT partners to focus on end user infrastructure while they focus on their own security network and security software client on end user devices etc. They also expect their IT vendor to provide personal support and not just play a trouble-shooting role. And finally, enterprises want us to focus on productivity and align our services to their core business, at a competitive cost.

It is these factors that we considered while we evolved our reach to the enterprises. We deliberated and came up with customized support planning for enterprise customers. A technicality here is that in the enterprise space, many of the customers are multi-locational, and that makes support requirements rather scattered. Some even have 30-40 locations and a mixture of services required at all locations. We often discuss support across their installed base, irrespective of the location. That is one of our chief initiatives. The second thing is that we provide personalized support in terms of upper managers. There are upper managers from a product range perspective as well as a support and service delivery perspective. Enterprise customers clearly see value in it.

### Since the service needs of SMEs differ from those of enterprises, does HP have different channels to cater to both these segments?

SMEs represents a growing segment for HP and that necessarily has to reflect in our service initiatives as well. We now cover about 150 cities from a resolution perspective and we have a wider reach through our call-centers for remote resolution. For SMBs, much like the enterprise space, we organize a service plan or knowledge session for the customers. We set up base at customer locations and conduct awareness sessions on optimal usage of desktops, laptops etc. We also run through common stuff like how can they better manage their laptops' battery, their chargers and what is the route to getting a



**Indian enterprises are grappling with the BYOD phenomenon. How have service demands evolved with the influx of mobile devices?**

There have been two sets of evolutions in this regard. One is the consumer segment which is overlapping with enterprise through multiple devices. Other is the segment consisting of pure play enterprise mobility products. We try to achieve a balance between type of service and user experience when it comes to mobility devices.

replacement etc. We also throw in things like automatic upgrades through patches and drivers. For smaller organizations, we also try a joint branding approach where we set up service camps for the employees.

Most enterprises today have an IT support team, either through their IT partners or their own in-house resources. However, that may not be the case with SMEs. We train our engineers in this aspect so that they can solve any non-hardware related problems remotely. We also follow a standard approach on keeping the SME customers updated on their service stages in case of hardware. This process follows a more automated route for enterprises.

For the enterprise segment (including SMEs), we were able to solve 30% of servicing requests remotely. For about 60-70% we have an on-site dispatch.

### How are your services changing with respect to printing devices, given HP's focus on MPS?

Only recently we launched our partner based Managed Print Services (MPS) initiative. In the printers area, we are looking to move from a transactional to a contractual model, which is basically a customer engagement model. So managed print service is where our energies are invested in this domain. We were doing it for the enterprise arena and have recently started doing it in a partner driven way, which means that all the SME customers also come under this printing services revolution ambit and move to a contractual model. We have different engineers for entry to mid-level printers and then a set of engineers for high-end and Multi Functional Printers (MFPs). Most customers move to MPS from a normal model.

In terms of our overall presence, we have the ability to cover close to 2000 cities. We have an engineering team of 1200 people, trained and certified both for printers and PCs. There are 150 cities where we have walk-in service centers. We also have additional service locations which are not customer walk-ins but partner offices who provide off-site services.

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## COLUMN

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# USABILITY: A KEY FACTOR IN SELECTING AN ERP SYSTEM

A user centric ERP system can empower even the most inexperienced employees as well as those with little IT knowledge



Return on investment, productivity, customer satisfaction and general efficiency are all impacted if an ERP system proves difficult to learn, and hard to use

**A**t the start of an ERP selection project, functionality is often the number one criteria. However, usability, or ease of use, is also an important point. Return on investment, productivity, customer satisfaction and general efficiency are all impacted if an ERP system proves difficult to learn, and hard to use. Employee adoption needs to be as swift as possible in order to realize the new system's benefits.

Some of the triggers for changing an ERP system typically include scalability, changes in business model, a lack of visibility and overall complexity — not just with regard to processes but also relating to ease of use. For example, as traditional, transactional ERP systems have been customised to fit industry specific processes, end users and in particular new users have needed more extensive training before they could become proficient and able to carry out their tasks. Today's modern ERP systems are much more user-friendly; and coupled with more comprehensive online education techniques, a workforce with varying IT capabilities can be fully trained and working live with the system within days, or even hours.

If employees feel confident and happy with a new system, the transition from old to new will be much easier. Employees often tend to resist change, but a user centric ERP system can empower even the most inexperienced employees as well as those with little IT knowledge. The sooner you get the buy-in from your workforce, the faster your organization will start to reap the benefits, a faster time to added value and a lower total cost of ownership.

Although training around functionality remains essential, the user interface (UI) can further add to the user experience. Familiar navigations, a visual layout and a logical flow of operation, all help increase

ERP usability. Mash-ups and dashboards are becoming more mainstream, and even more intuitive when they are role based and can be personalised. Access to tailored reports, supported by real time data, enables decision making, facilitates strategic planning and gives the user a comprehensive picture of relevant activities at any given moment. The more that relevant information is brought to the user from inside the ERP system, the less they have to look for it. Additional web parts or social media type applications can bring added value, providing more contextual information.

As businesses expand operations and travel becomes commonplace, ERP systems must not only be scalable to adapt to the changing needs of growing operations, they must become more flexible. ERP needs to go on the road.

Everyday devices such as smartphones and tablets allow business anywhere, and when users can take their ERP system with them wherever they go, there is no starting or stopping business activities and operations can run smoothly. Furthermore, if the desktop version is replicated in the mobile version, users can easily transfer their ERP knowledge, making the mobile format instantly usable.

It is evident that new technologies will continue to increase the user experience and create loyalty in the consumer world, so it's logical to think that this will also become the case in the business world. When you look closely at what contributes to a successful ERP project, usability impacts not only short term adoption but business efficiency and customer satisfaction. Perhaps usability should be more measurable criteria in the ERP selection process?

Malcolm Fox is Vice President of Product Marketing at Epicor Software Corporation.





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**EVENT**

**SAP INSIDER**



Francois Lancon, President and MD, SAP South East Asia, delivering his keynote

## BI TO THE NEXT LEVEL

SAP Insider 2013 stressed on the need for unlocking the power of data for real-time business insights and optimized decision making

**BY KTP RADHIKA**

**D**ata growth continues to double or even triple every year or two and organizations are facing many challenges in deriving meaningful information from data. At the recently held SAP Insider 2013 event at Singapore, the software giant presented some interesting insights on the new developments happening in the big data field and how some new sectors like sports are increasingly using business intelligence and analytics to run their businesses better.

Presenting his keynote address, Francois Lancon, President and Managing Director SAP South East Asia

stressed on the growth of big data and the importance of analytics in the age of social and mobile. He observed that once, social was all about personal and now its all about business. "Success depends on how you transform your business and SAP enables in that transformation." Citing an example of Formula 1, Lancon said that a F1 car has a lot technology and generates about 1 GB of raw data. "F1 is a business and if you put analytics into it, you can get more value out of it."

Many of the analytic solutions today are back ward looking. But to run a smart business, a company needs a forward looking solution felt Kurt J Bilafer,



Regional VP, Analytics, SAP APJ. Speaking on the topic 'Analytics: the power of people', he said that it is important to get meaningful insights from the data that is popping out from social media, mobile devices and machine to machine communication in huge variety and volume. To tame the ever growing data, a company would require a smart analytical solution. With HANA, BusinessObjects (SAP's BI software) and Lumira (visualization software) companies will be able to get meaningful information about their businesses.

### Big opportunities

SAP is expecting that its partners around the world will earn US \$220 billion in revenue in the next five years from its analytics and big data products. In that, almost about US \$50 billion will be from Asia Pacific Japan (APJ) region. Last year, the company's partners made US \$6.1 billion of revenue in analytics and big data.

Big data does not always mean big enterprise. It is applicable to any size of organization. What is important is that the company has to have correct data tools to extract and analyze data. These were the thoughts that Anthony McMahon, SVP, Platform Businesses-Database, Technology, Analytics & Mobility SAP APJ shared.

Talking on 'Changing the Game with Big Data,' he pointed out that marrying analytics with external data should bring in a change in the overall business process of an organization. He said that BI will help companies in understanding customers in a better way and help servicing them better. For instance, predictive analytics can offer predictive healthcare which will help in providing the right services to every customer.

SAP showcased several analytic technologies that can help companies revolutionize their decision making process. SAP HANA, SAP BusinessObjects BI solutions, SAP Lumira, a next level visualization technology and their cloud and mobile analytic solutions were on display.

### New areas

According to SAP, the top ten verticals with analytics and big data opportunities

are discrete manufacturing, process manufacturing, government, communications and media, banking, professional services, retail, healthcare, utilities and insurance. While the top drivers for adoption are cost control, operation optimization, financial analysis and risk management, companies are also using analytics heavily for customer acquisition, retention and product innovation.

SAP Insider also discussed about how some new verticals like sports are increasingly adopting BI and Analytics. "SAP helps more than 248,500 customers in 25 industries run better. Now we are bringing our experience and world-class technology to sports teams, leagues and venues to help them run faster, smarter and simpler," Bilafer explained.

SAP has developed solutions for fan engagement, drive on field performance and optimize business efficiency. Citing a use case of McLaren Group (an F1 racing company), Bilafer explained how the company was able to analyze fuel consumption, optimum time for pick up, drivers' performance etc. with SAP HANA. "The real-time analysis of car sensor data against both historical data and predictive models, helped the team to make immediate proactive corrections, avoid costly, dangerous incidents and win the race. With instant analysis of what is happening to the car while the race is on, the driver and engineers can work together to ensure a winning result," he said.

SAP Insider also witnessed many other interesting use case presentations. For example, Kimberly-Clark, a company well-known for its global brands like Kleenex, Scott, Huggies, Pull-Ups and Kotex, demonstrated how data analytics plays an important role in tracking the sales performance of its Huggies brand of diapers during promotion and measures the results against its market projections. SAP BusinessObjects Mobile has enabled the company to build a portfolio of mobile BI applications that provide key decision-makers with access to analytics and powerful insights anywhere, anytime.

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## "VISUALIZATION IS IMPORTANT IN ANALYTICS"



Anthony McMahon, Senior VP, Platform Business - Database, Technology, Analytics & Mobility, SAP APJ, talks about the benefits that visualization brings into analytics

### ● On focus areas for SAP:

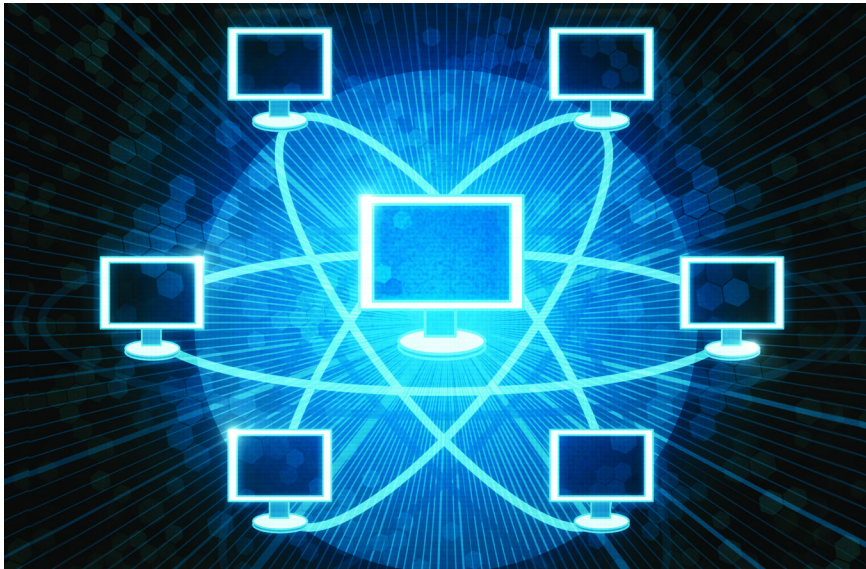
In the past five years SAP has graduated significantly from being just an application company. We have developed our own technologies like HANA and also acquired companies like BusinessObjects, a leading analytics vendor, Sybarite that provides mobile solutions, SuccessFactors, a cloud based human capital management solution provider, Aruba, a database procurement solution provider. Thus, SAP has emerged from an application company to a platform and management company. Today almost 50% of our revenue comes from these platform businesses.

● **On the scenario in India:** India is the fastest adopting country for SAP's business suite on HANA. In terms of platform solution business, we can see a perfect mix of SMEs and enterprise customers in India.

● **On the importance of visualization in analytics:** Visualization is a complementary technology to increase the intrusiveness of the data. Visualization will enhance the results of analytics and will help present the story in a much better way. It can be applied to any analytics data.



# Cisco launches Network Convergence System



CISCO HAS INTRODUCED the Cisco Network Convergence System (NCS), a network fabric family designed to serve as the foundation of a scalable, smarter and more adaptable internet. Several global service providers — including BSKyB (Sky), KDDI and Telstra — are deploying the Cisco NCS to create new revenue streams, simplify operations and deliver personalized experiences to their customers. The system's programmability and virtualization capabilities will enable service providers to accelerate the transition to software defined networking (SDN) and network function virtualization (NFV).

The NCS's capabilities will enable service providers to not only accommodate growing network traffic but also seize the opportunity created by trillions of programmable device-driven events generated by the Internet of Everything (IoE), the networked connection of people, data, processes and things.

The NCS family, with more than 100 patents, joins the Cisco Carrier Routing

System (CRS) and Aggregation Services Router (ASR) families and acts as a foundational network fabric to interconnect the architecture. Built for petabit scale and capable of supporting trillions of events across a connected fabric, the NCS is capable of transporting an entire Netflix library in less than one second.

The Cisco NCS family consists of three key components- NCS 6000, NCS 4000 and NCS 2000 that can be managed as a single integrated system for business agility and simplified operations."NCS will provide a competitive edge to service providers in India who are currently grappling with multiple challenges, and will help prepare their infrastructure to create differentiated consumer experiences in order to capitalize on market opportunities offered by the data/video growth and device proliferation. We are bullish about the adoption and success of NCS by Service Providers in India," said Sanjay Rohatgi, Managing Director, Service Provider Sales, Cisco India and SAARC.

## CMS to deploy over 7850 ATMs for SBI

CMS INFO SYSTEMS has won a contract from State Bank of India (SBI) to deploy more than 7,850 Automated Teller Machines (ATMs) across the country. This is said to be the single largest deployment contract awarded by any bank in the country, valued at over Rs. 4.5 billion, and will include total implementation services, ATM installation, maintenance and support for a 7 year period. CMS Info Systems will be installing ATM's manufactured by Nautilus Hyosung of Korea. Commenting on the development, Mr Rajiv Kaul, Executive VC and CEO of CMS Info Systems said, "We are honoured to be



to be awarded this project by SBI. In executing what is possibly the single largest ATM deployment in the world, we shall leverage our deeply entrenched cash management network over 2500+ towns and experience in project management, to significantly improve access, uptime, and quality of service for the bank's customers."

These ATM's will be deployed across all regions in India with a significant focus on semi-urban and rural areas. This is expected to provide the necessary infrastructure for multiple financial inclusion initiatives, including the Direct Beneficiary Transfer Scheme.

# HP unveils its new MFP line up



Left to right: Rajiv Srivastava, President, PPS, HP India; Nitin Hiranandani, Director, Printing Systems, PPS, HP India and Pradeep Jotwani, Senior Vice President, LaserJet and Enterprise Solutions, HP

HP RECENTLY INTRODUCED its new range of A3 multifunction printers (MFPs) developed specifically for the Indian market. The newly launched line up includes the HP LaserJet Pro 400 M435nw — and two new HP LaserJet Enterprise M800 series flow MFPs that feature near field communications (NFC) touch-to-print and wireless direct functionalities.

The company estimated that more than 50 percent of devices sold in India are MFPs. It also observed that India currently has more than 143 million mobile Internet subscribers and a lot of mobile and tablet device users within the enterprise would like to print documents directly from their mobile devices. The printers with NFC and wireless direct are particularly aimed at this crowd of users in the enterprise.

The LaserJet Pro 400 MFP 435 according to HP, is a made-for-India

innovation that is aimed at bringing affordable A3 printing to Indian SMBs or small workgroups, with features like HP wireless direct for simpler mobile printing and a high print speed at 30 pages per minute.

HP also expanded its flow MFP portfolio with the launch of LaserJet flow MFP M830z and Color flow MFP M880z — one of the first NFC-enabled enterprise class MFPs featuring “Touch to print” capabilities. These devices allow enterprise users to print from any NFC-enabled smartphone or tablet with just one touch. They are also designed to safeguard sensitive data with the HP High-Performance Secure Hard Disk and feature on board Optical Character Recognition (OCR). They also feature HP’s EveryPage technology that helps avoid missing pages when scanning.

“Organizations need to adapt quickly to the changing landscape of information

technology, which includes dealing with the vast amounts of data and processes created by a growing mobile workforce,” said Pradeep Jotwani, senior vice president, LaserJet and Enterprise Solutions, HP. “New innovations and an updated LaserJet printing portfolio will help improve customers’ mobile print experience and transform the management of digital and print workflows for potentially greater business performance.”

He also observed that the MPS market is a US \$30 million market and growing at about 11 percent per year. Within that, the partner space is growing a lot faster than the direct MPS space.

Looking to better tap its partner ecosystem in the country, the company also announced its new HP Managed Print Specialist Resell program. According to HP, India is the first country in Asia to launch this program. The program is designed to precisely meet the unique demands of customers in India.

The HP Partner MPS program will offer customers a cost-per-page agreement, fleet optimization and solutions, coupled with differentiated services for maintenance and supplies replenishment. The HP Managed Print Specialist Resell program is designed to provide resellers with greater differentiation in the high-growth market of Managed Print Services (MPS) among India’s SMBs and enterprises.

The program in future will also include access to a cloud-based application — HP Express Decision Portal — that would connect customers, partners and HP Support in a chain, providing partners with “proposal and quote generation for cost-per-page pricing, client invoicing and reporting, device monitoring, and account and contract management.”

The HP LaserJet Pro 400 M435nw is priced at Rs. 63,750 while the HP LaserJet Enterprise M830 MFPs and HP LaserJet Enterprise M880 MFPs are priced at Rs. 709,164 and Rs. 701,553 respectively.



# Brocade announces SAN management solution



BROCADE HAS ANNOUNCED the availability of its new Brocade Fabric Vision technology capabilities, which promise to deliver an advanced storage area network (SAN) management solution. The new features, Monitoring and Alerting Policy Suite (MAPS) and Flow Vision, provide capabilities that can simplify SAN administration and reduce operational costs, while further improving the availability and performance of Brocade Fibre Channel SANs.

Fabric Vision technology is a hardware and software solution that can help IT organizations accelerate new SAN deployments, optimize resources and dramatically reduce operational costs. With the technology,

administrators have new tools and automation that can simplify day-to-day SAN management tasks, increase productivity and enable proactive management of SAN infrastructures to help ensure the highest levels of availability and performance.

"Fibre Channel continues to be the data center technology of choice to support the growing demands of highly virtualized environments, cloud architectures and new flash-based storage because it delivers the highest levels of reliability, scalability and network performance," said Jack Rondoni, Vice President, Data Center Storage and Solutions, at Brocade. "The innovative Fabric Vision technology capabilities that are available today

continue to advance the core values of Fibre Channel, and are a strong proof point of Brocade's continued leadership in data center SANs."

MAPS is a policy-based monitoring and alerting solution that can proactively monitor the health and performance of the SAN infrastructure to help ensure application uptime and availability. Leveraging built-in policies that contain hundreds of threshold-based rules and actions that have been vetted by Brocade SAN experts, the solution can eliminate the complexity, guesswork and manual effort of defining and deploying a proactive monitoring and alerting solution.

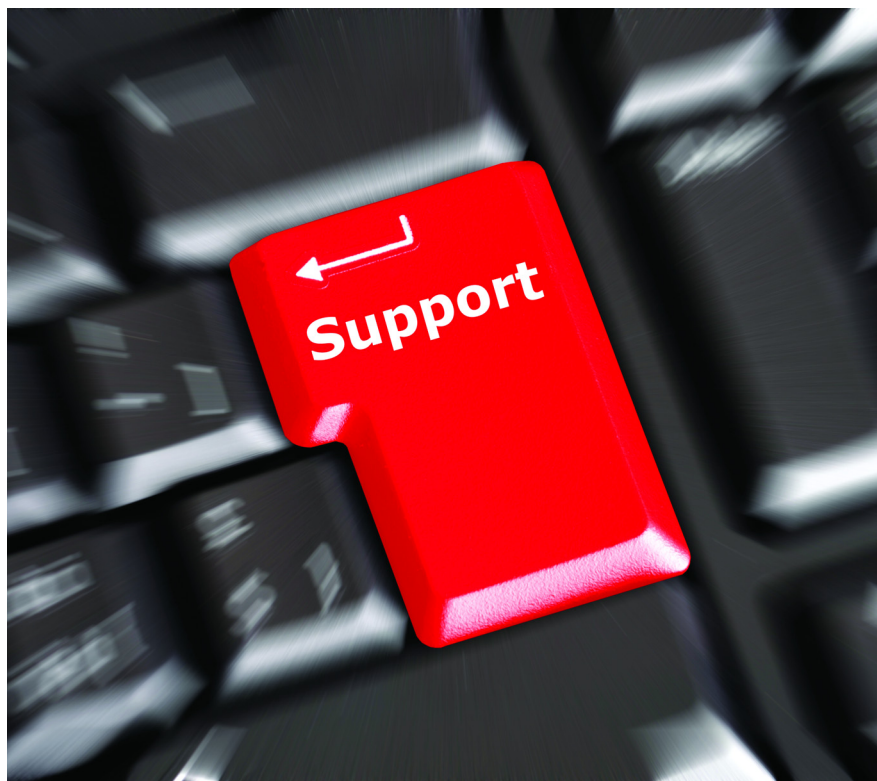
Organizations can further reduce operational costs by configuring MAPS policies across an entire fabric or multiple fabrics. In addition, it allows for customizing rules for specific ports across fabrics at one time using a single dialog box. An integrated dashboard displays a health report for each switch, along with details on out-of-policy conditions, to help administrators quickly pinpoint potential issues and easily identify trends and other behaviors occurring in a switch or fabric.

Flow Vision is a comprehensive, built-in tool that allows administrators to non-disruptively identify, monitor and analyze specific application and data flows in order to maximize performance, optimize resources and avoid congestion.

Flow Vision can provide broad visibility into flows in the fabric, and offers the ability to automatically detect flows, non-disruptively monitor flow performance, and obtain statistics associated with specific flows to ensure maximum application performance and resource optimization. When used in conjunction with MAPS and Brocade Network Advisor, Flow Vision enables proactive application management.



# Dell adds Windows Migration Services to its offering



WITH THE CLOCK ticking toward the end of Windows XP support in April 2014, Dell Services has added Windows Migration Fast Forward Service to its set of migration services. Dell's Windows Migration Fast Forward Service claims to help customers jump-start a new migration or fast-forward one already in progress with tools and practices to ensure readiness. This, in addition to migration solutions from Dell Software, is expected to provide for a smoother, more cost-effective migration.

At present, Dell Services deploys more than a million enterprise-class Windows 7 and Windows 8 devices in over 150 countries each year. Dell's team

of IT experts simplifies the path to migration with services that deliver application, hardware and deployment readiness. Dell's Windows Migration Fast Forward Service offers pre-packaged modules to address all stages in the Windows migration process for up to 5,000 PCs including: image engineering, inventory and rationalization of applications, application compatibility testing, application packaging, deployment planning, process automation and field deployment. This gives customers the flexibility to choose the package of services that best fits their needs while streamlining the process to save time and money.

## Bosch Software Innovations partners with Tech Mahindra

**BOSCH SOFTWARE INNOVATIONS**, the software and systems house of the Bosch Group, and Tech Mahindra Ltd have announced a global strategic business relationship with a primary focus on the global manufacturing and transportation industries.

The partnership aims to develop and deliver scalable software solutions for an interconnected world, also known as the Internet of Things and Services. It will concentrate on accelerating the delivery of software solutions, reducing time-to-market and upfront capital investments for customers. The solution offerings arising from this partnership will address topics such as industrial equipment management, connected services and intermodal transportation.

"Tech Mahindra's expertise in enterprise solutions and its global market presence, along with our state-of-the-art product portfolio and industry expertise, will enable both companies to deliver innovative end-to-end solutions to our customers," said Klaus Hueftle, Managing Director at Bosch Software Innovations GmbH.

"Bosch Software Innovation's cutting edge technologies for the Internet of Things and Services perfectly complement Tech Mahindra's connected world focus. The partnership is a strategic alliance that will help us to provide our customers and prospects with solutions to increase efficiency and save net costs," added Rajeev Sundaresan, Head, Business Process Management, Tech Mahindra.

# Accenture helps Maharashtra Sales Tax Department upgrade its IT infra



ACCENTURE HAS ANNOUNCED that it is undertaking a management consulting project to help transform the Maharashtra Government's Department of Sales Tax to maximize revenue collection and strengthen its enforcement function.

Accenture will also identify a service provider to upgrade the department's technology infrastructure with the goal of increasing efficiency and updating record maintenance so historical data will be easier to access and identify. The improvements also are expected to make it easier for taxpayers to interact with the department.

"The Department of Sales Tax is a major revenue collecting body for the government of Maharashtra,

contributing about 60% of all revenue," said Nilaya Varma, Managing Director for Accenture's Health & Public Service management consulting business in India. "The project will facilitate improved business processes and create multiple channels for service delivery, facilitating prompt action that will lead to improved services and more interactive communication."

The state of Maharashtra has always been a leader in automation in the government sector, and the programs it implements will become a benchmark for other states, Varma added.

Dr Nitin Kareer, Commissioner of Sales Tax, said that a comprehensive automation of the department identified issues like flexibility, scalability and

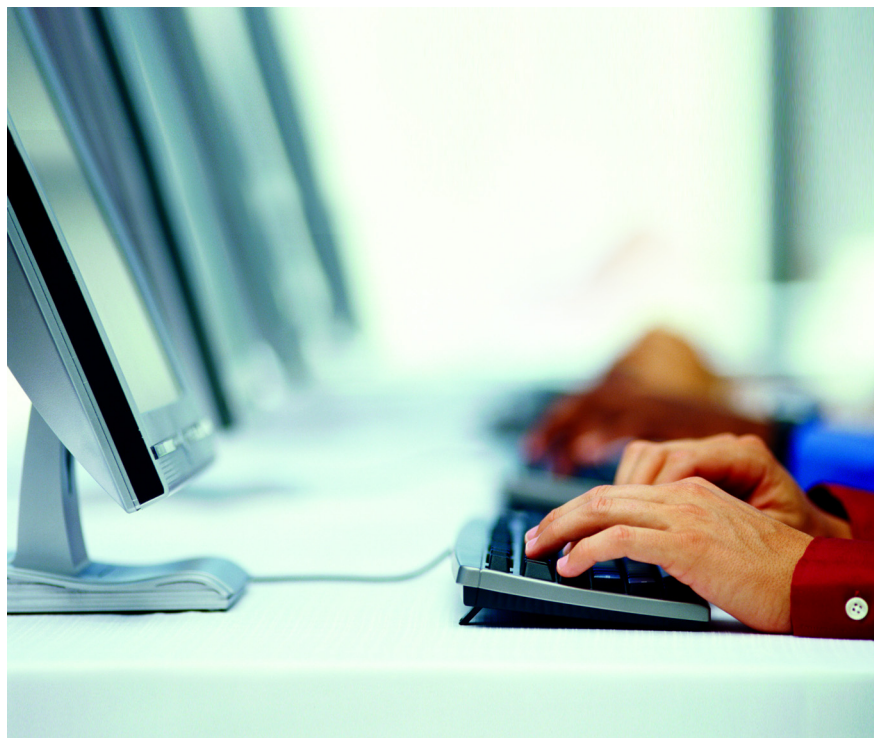
integrity of data in the current system.

"Compounding the matter were the needs of departmental staff which have increased to include workflow automation and smarter systems that can aid in decision making. Accenture has spearheaded a multitude of projects in analytics consulting and, through this partnership, we hope to achieve efficiency in our existing processes," Kareer said.

"The simplification and streamlining of procedures will support the department in achieving a better control on tax evasion with the help of technology. It will also help in reducing administrative overhead, which is another plus in a time of economic uncertainties," he added.



# Gartner pegs Indian IT spend at US \$71.3 billion for 2014



GARTNER, IN ITS recent estimate has observed that IT spending in India is projected to total US \$71.3 billion in 2014, a 5.9 percent increase from the US \$67.4 billion forecast for 2013.

According to the research firm, IT services will record the strongest revenue growth at 12.1 percent and software revenue will grow 10 percent. It also observed that telecommunication services segment, that accounts for 42.1 percent of the Indian ICT market, is set to grow 2 percent in 2014. The telecommunications services market which includes fixed and mobile, data and voice services will continue to be the largest IT segment in India with IT spending forecast to reach \$30 billion in 2014.

The firm also observed that the devices market in India, which includes

mobile phones, PCs, tablets and printers is expected to total US \$23.5 billion in 2014, a 6 percent increase from 2013.

Gartner believes that the Indian devices market will emerge as the largest segment of IT spend in India by 2017. Growth within this segment will be driven by the sale of mobile phones which will be amongst the fastest growing sub segments within the Indian IT industry. Mobile phone revenue will total \$26 billion in 2017 and will account for 76.4 percent of device revenue and 28 percent of overall IT spend in India in the year 2017.

"Mobile smart devices have taken over the technology world. By 2017, new device categories: mobile phones, tablets, and ultra-mobile PCs will represent more than 80 percent of device spending. Gartner also forecasts

that by 2017, nearly half of first-time computer purchases will be a tablet. Mobile is the destination platform for all applications," said Peter Sondergaard, senior vice president at Gartner and global head of Research.

Another trend that the company observed is that CIOs are significantly interested in changing their IT suppliers in the coming years. In the past, the top technology companies reigned over the industry for long periods of time. However, the current leaders in areas such as cloud and mobile were not on many CIO's radar five years ago.

"What many traditional IT vendors sold you in the past is often not what you need for the digital future. Their channel strategy, sales force, partner ecosystem is challenged by different competitors, new buying centers, and changed customer business model," observed Sondergaard.

Partha Iyengar, distinguished analyst and Gartner India head of research observed that mobility is where at of the traditional big vendors are struggling as their legacy software is designed for the desktop metaphor. Therefore they are struggling to deliver volume-based services on the mobile platform.

He also was of the view that there is an increasing interest in using alternate service providers. Companies will be looking at where the innovation is coming from and the new age vendors (many of which have been catering to the consumer market) are better positioned to deliver even in the enterprise market.

Another trend that both Sondergaard and Iyengar talked about is organizations increasingly looking at new leadership roles such as Chief Digital Officer and Chief Data Officer and Gartner believes that by 2014, 19 percent of organizations will look at hiring a Chief Digital Officer while 17 percent will look at hiring a Chief Data Officer.

# “Cloud computing is very important for India”: Infosys’ Kris Gopalakrishnan

“CLOUD COMPUTING IS very important for India,” Krish Gopalakrishnan, Executive Vice-Chairman, Infosys said during his inaugural address at the IEEE Cloud Computing for Emerging Markets summit in Bangalore.

“It (cloud computing) empowers individuals with computing at low cost as well as cloud technology can be leveraged for health, education and other services. Cloud technology also offers opportunities for innovation, startups, careers in tomorrow’s technology and for existing IT services companies to stay relevant,” Gopalakrishnan explained on the importance of cloud in India.

According to Gopalakrishnan, Indian government must support cloud computing and promote it by using cloud technology in various e-Governance projects. “Government must come up with regulations that promote cloud technology and encourage startups to use cloud. Leadership in cloud related policies must come up with consistent and predictable regulations by joining standard bodies,” he stated.

Further, “Cloud must be made part of academic and institutions. Government must take initiatives to encourage



organizations to use cloud and also need to enable investments in cloud infrastructure,” he added.

During his address, the Infosys co-founder called ‘cloud computing’ technology as a revolution as it offers many benefits such as unlimited computing and storage at very low costs, affordable mobile based accessibility and

offering services by leveraging cloud technology.

“The combination of cloud, mobile and internet makes a disruptive technology today. Cloud is a disruptive technology for enterprises as it creates new business models for outsourcing, significantly lower cost and vertically integrate service providers. It changes the build versus buy equation for IT systems and allows enterprises to focus on their business,” observed Gopalakrishnan, who is also the President of Confederation of Indian Industry (CII) for 2013-14.

Moreover, he emphasized that every organization should develop a cloud strategy, they should look at cloud based solutions and avoid vendor lock-in, which demands standards and interoperability. “That’s where bodies like IEEE play significant role.”

Earlier this month, IEEE announced Cloud Computing Innovation Council of India (CCICI) to push cloud standardization initiatives in India. Gopalakrishnan also released a comprehensive white paper — “A Roadmap for Cloud Computing Innovation in Indian” at the conference today. The three day cloud computing conference is in its second year.

## Pegasystems acquires Antenna Software

PEGASYSTEMS, A PROVIDER of Business Process Management (BPM) and Customer Relationship Management (CRM) solutions, has acquired Antenna Software, a player in Mobile Application Development Platforms (MADP).

With Antenna, Pegasystems adds a leader in the Gartner 2013 Magic Quadrant for Mobile Applications Development Platforms1 to its existing Magic Quadrant leadership in BPM and

CRM to deliver better business software to any channel. Key benefits of this combination include faster time-to-market and increased flexibility in end-to-end mobile application development.

Antenna will help Pegasystems develop a powerful mobile application and device management profile.

“Traditional mobile technology can lead to separate channel-specific applications which hamper customer service and efficient operations,” said Alan Treffer,

Founder and CEO of Pegasystems. “Pega’s distinctive customer-centric approach to mobility enables business users and IT to create optimal customer experiences across channels and devices. We believe that mobile devices should seamlessly operate with processes and cases to drive work to done. Pega and Antenna coming together offers our collective clients state-of-the-art mobile development, responsive UIs, device management and cloud-based Backend-as-a-Service.”



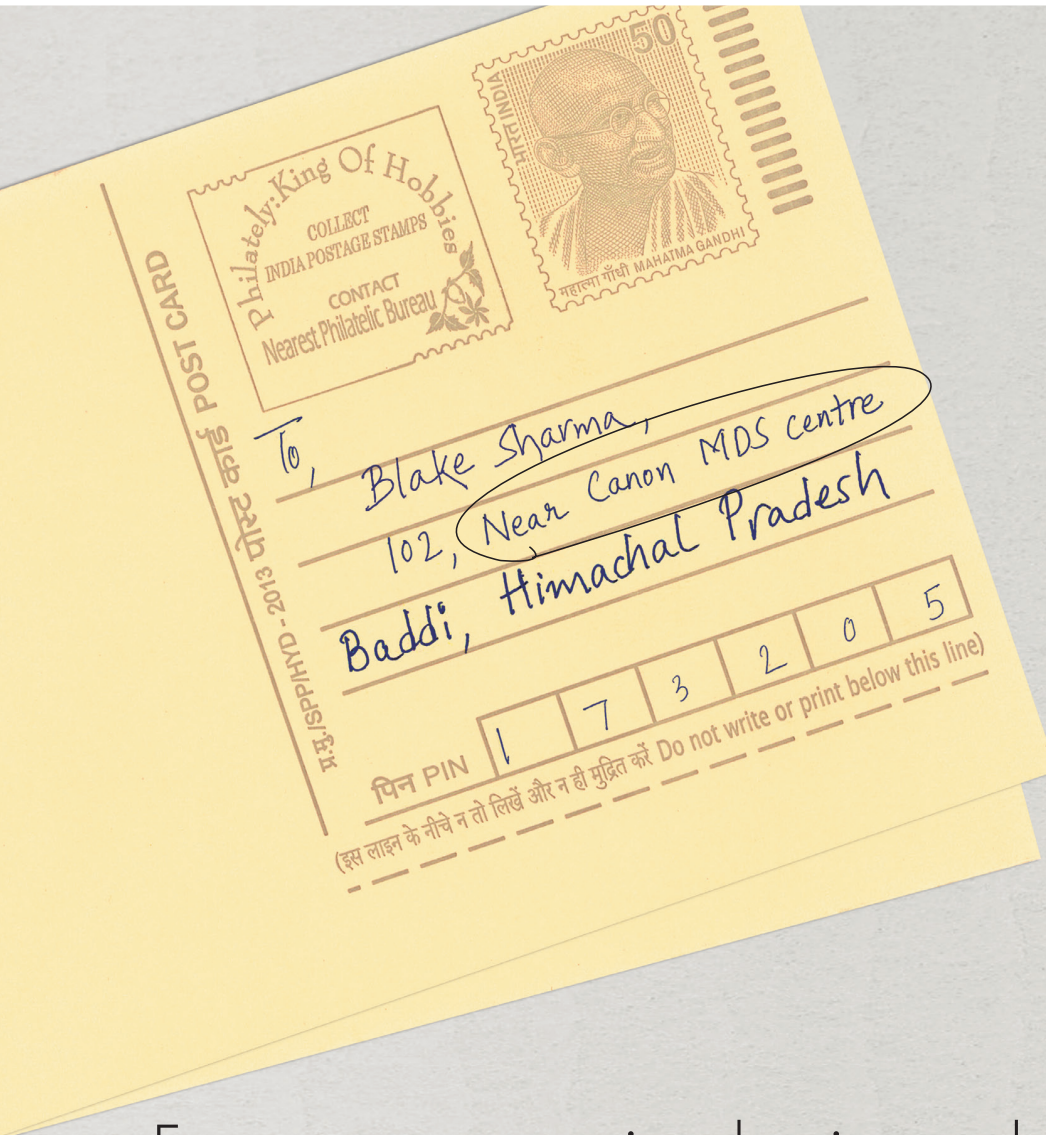


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